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# WYOMING QUARTERLY UPDATE

Fall 1987
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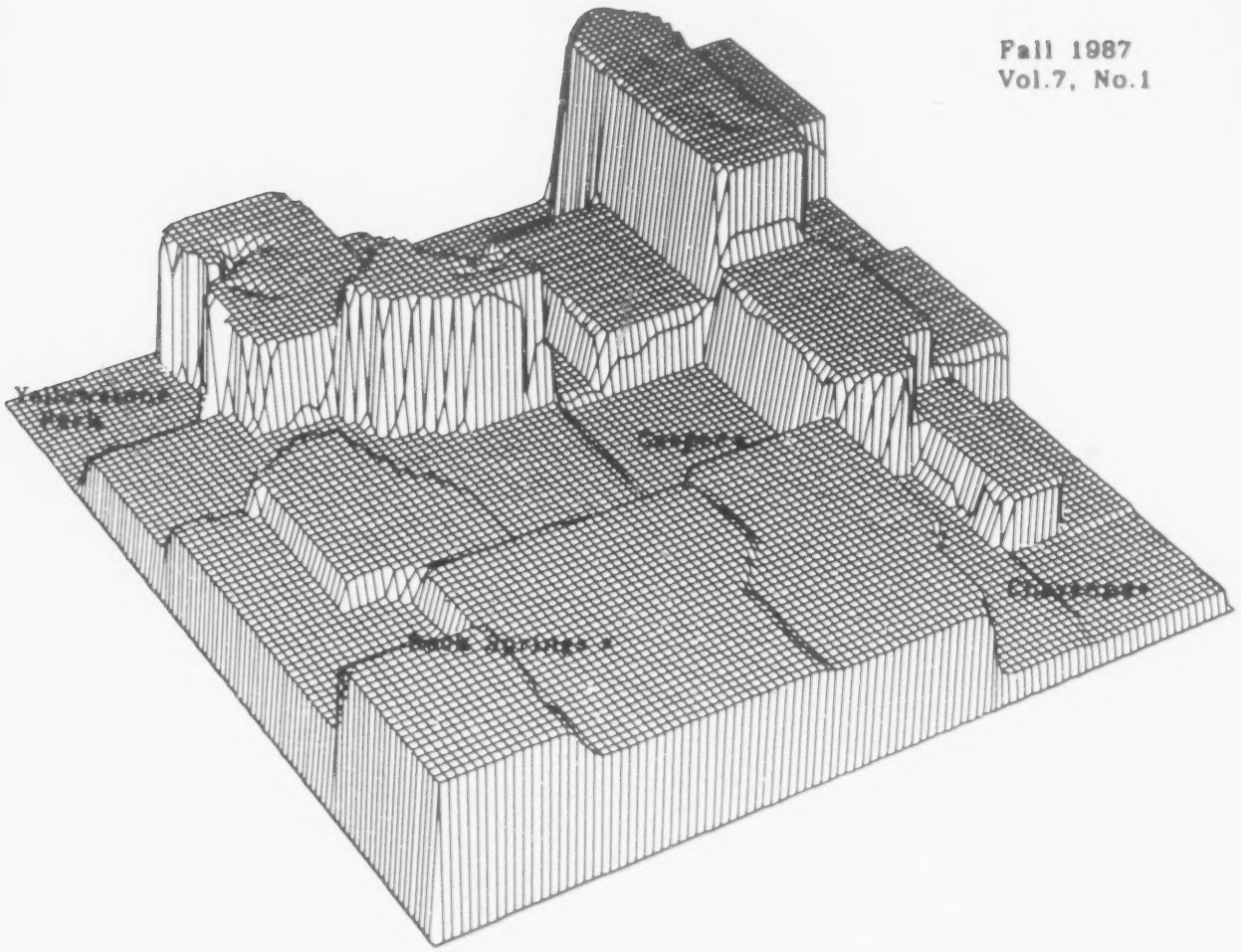


IPR

1986 Assessed Property Valuations Per Pupil
(based on Fall 1985 enrollments)

INSTITUTE FOR POLICY RESEARCH
OFFICE OF RESEARCH AND GRADUATE STUDIES
UNIVERSITY OF WYOMING

# Wyoming Quarterly Update

Wyoming Quarterly Update (WQU) represents the efforts of the Institute for Policy Research (IPR) at the University of Wyoming to provide improved data access services. The data presented in WQU are assembled from secondary sources, such as government agencies and private industry. The staff of IPR greatly appreciates the ongoing, cheerful cooperation of each of the data sources listed in the bibliography.

WQU provides current indicators and timely, easily accessible data. Most of the data published in WQU are updated quarterly with the most current numbers. The complete data sets from which WQU originates are maintained, together with documentation by IPR. Readers are encouraged to contact IPR to find out how to gain access to data which do not appear in the WQU. Many data series, such as gasoline sales and taxation data, span more than 30 years. Numerous other series cover 20 years or more.

Efforts to expand the subject and geographic detail (county data) of data sets will be made continuously.

The cover of each edition features a contour map illustrating the geographic distribution of a particular variable. This edition presents a contour map depicting 1986 assessed property values per pupil enrolled in the fall of the 1985-86 school year. The valuation per pupil ranged from a low of $17,842 in Laramie County to a high of $200,192 in Campbell County.

First-time readers of WQU should refer to the "format" explanations on page 48 for keys on how best to use and interpret data presented in this publication.

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OTHER IPR SERVICES AND RESEARCH REPORTS ARE LISTED AT THE END OF THIS WQU.

# TABLE OF CONTENTS


WYOMING SCENE
- Minerals Outlook....2
- Agricultural Outlook....11
- Job Openings Outlook....14
- Coincident Indicators Index....15

EDUCATION IN WYOMING
- Discussion....18

ECONOMIC CHANGES
- Review....32

WYOMING DATA
- Agriculture....34
- Banking and Finance....35
- Business Conditions....36
- Construction....37
- Consumers....38
- Employment and Labor....39
- Energy and Mineral Production....40
- Government....41
- Tourism....42
- Utilities....43
- Transportation....44
- Vital Statistics....45
- Rent by City....46
- Wyoming Cost of Living Index....47
- Format Description....48
- CRIS Information....49
- Publications List....50



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WYOMING
SCENE

# Fall Minerals Outlook

OVERVIEW

The prognosis for the State's mineral industry is still a mixed bag. There are, for certain, some good things happening, but all is not rosy and the good things are often only in the eyes of certain beholders. At least, many down-trends have slowed or even turned around, but subsequent events cast a slight pallor on almost everything positive that happened in the last three quarters of 1987. Overall, however, things have improved over 1986.

While increased rig counts and higher posted oil prices do bode better times for the State's petroleum industry, neither of these events will stop the overall decline in Wyoming's oil production. It took four to five times the drilling activity and a better price of more than $10/barrel for the decline in oil production to stop in the early 1980s and neither of those events are likely to occur again in the near future. For the next few years, however, there is a good probability that oil prices will stabilize or even gradually increase and that these relatively higher prices will encourage modest drilling levels that may lead to enough production to reduce the current seven percent decline in oil production. The increase in production shown in 1989 (See Table 1) reflects resumed or new production from Buck Draw, Lost Soldier, Wertz, Luckey Ditch, Taylor Ranch, and Hickey Mountain fields.

The petroleum industry has also availed itself of some tax incentives passed by the Wyoming Legislature during the past several years. These various tax incentive bills reduced severance taxes on an estimated 6.3 million barrels of gross oil production in 1987 (the bills reduced the six percent tax to four percent). By 1991, an estimated 18.7 million barrels of gross production could benefit by these incentive bills. Collectively, companies may save two percent on an estimated 70.6 million barrels of oil produced between 1987 and 1991. The tax incentive bills, each with slightly differing durations, included breaks for tertiary recovery operations, for new wildcat wells drilled after January 1, 1987, and for units whose average well production, under a new definition, qualify as stripper production (most notably Salt Creek Field). While helping the depressed oil industry, however, these same incentives have an inverse relationship to the State's operating revenues since the excused two percent tax previously went into the State's General Fund.

Although natural gas production continues to climb, the price has not rebounded as hoped by many. While most forecasters believe the gas glut is essentially over, Wyoming still has many natural gas wells shut-in. The Kern River pipeline project offers some hope for finding a

Table 1:

WYOMING MINERAL PRODUCTION FORECAST TO 1991[1].

| Calendar Year | Oil Production[2] | Natural Gas Production[3] | Carbon Dioxide Production[3] | Coal Production[4] | Trona Production[4] | Mined Uranium Production[4] |
|---|---|---|---|---|---|---|
| *1981 | 122.1 | 455.4 | ---- | 102.8 | 11.8 | 4.6 |
| *1982 | 118.7 | 465.1 | ---- | 107.9 | 10.1 | 2.1 |
| *1983 | 120.9 | 539.7 | ---- | 112.2 | 10.5 | 3.0 |
| *1984 | 127.8 | 600.1 | ---- | 130.7 | 11.0 | 1.6 |
| *1985 | 131.0 | 597.9 | ---- | 140.4 | 10.8 | 0.6 |
| *1986 | 122.4 | 563.2 | 23.8 | 136.3 | 13.3 | 0.3 |
| 1987 | 115.6 | 613.0 | 120.0 | 140.0 | 13.4 | 0.3 |
| 1988 | 111.0 | 630.0 | 120.0 | 143.0 | 13.6 | 0.3 |
| 1989 | 117.0 | 665.0 | 120.0 | 146.0 | 13.7 | 0.3 |
| 1990 | 108.0 | 700.0 | 120.0 | 149.0 | 13.8 | 0.3 |
| 1991 | 100.4 | 730.0 | 120.0 | 152.0 | 13.9 | 0.3 |

*Actual values for comparison
[1]Geological Survey of Wyoming, September 1987
[2]Millions of barrels
[3]Billions of cubic feet
[4]Millions of tons

market for up to 350 million cubic feet of gas per day. Amoco's Phase II project at Bairoil will also put more of Exxon's carbon dioxide to use. Complicating the benefits of increasing natural gas production, particularly from a revenue standpoint, is the fact that taxes on 120 billion cubic feet of carbon dioxide and 60 billion cubic feet of methane and other gases from Exxon's Shute Creek Plant are not collectible because of ongoing litigation. In both cases, Exxon is arguing that there is no value after the cost of processing the raw gas. The outcome of these cases has some far-reaching consequences for the State and Federal governments as well as for numerous royalty owners.

While coal production should recover from its decline of last year, production is only expected to increase at very modest rates into the 1990s. No big jump in production is forecast, although some new beneficiation projects, which increase the heat value of Wyoming coal, offer some hope for the future in attracting new markets. Tempering these bright spots was the recent announcement that the Clovis Point Mine in the Powder River Basin would go on standby in 1988. This is the first major coal mine in the Powder River Basin to close. As mentioned last quarter, in situ production of uranium is resuming. This is occurring at the same time that Wyoming's last surface mining uranium company has cautioned that new tax rates threaten its continued existence.

As a final bright spot in Wyoming's mineral industries, interest in gold is continuing, although there are still no gold mines in operation. Placer mining is recovering significant gold, but on a rather small scale. With the coming winter, gold exploration will decline as snow moves into the mountains of the Cowboy State.

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## OIL AND GAS UPDATE

Several encouraging developments related to the Wyoming petroleum industry occurred during the third quarter of 1987. The rig count rose rapidly from a monthly average of 29 in July to a monthly average of 65 in September. There was an average weekly increase of four rigs since the second week in July when only 26 rigs were working in the State. In early October, there were 68 rigs at work in Wyoming. The last time the rig count was this high was in January 1986. The increase in drilling activity over the third quarter gave a much needed boost to oil field service companies which provide oil field equipment, service, and transportation. Another bright spot is that Wyoming's rig count increased by eight while the national count decreased by 14 in the same period. With seasonal adjustments, Wyoming's rig count could approach 90 rigs by years end.

Amoco Production Company recently announced plans to proceed with Phase II of their enhanced oil recovery project at Bairoil, Wyoming. More stable crude oil prices and currently favorable results at Wertz Field (Phase I) are cited as reasons for initiating Phase II. Production at Wertz increased steadily from an average of 4,100 barrels per day in December 1986, to an average of slightly over 10,000 barrels per day in June 1987, the last month of which production statistics were available. Phase II was delayed by Amoco in March 1986, because of falling crude oil prices at that time. Phase II will expand the project to Lost Soldier Field where a pipeline distribution system will be built to inject carbon dioxide into the Tensleep Sandstone and Madison Limestone to recover additional hydrocarbons. The existing carbon dioxide recycling plant at nearby Wertz Field will also be expanded. Construction on the $70 million project will begin next Spring with injection of carbon dioxide scheduled to begin in November 1988, and plant expansion to be finished in April 1989.

Wyoming sweet crude had an average posted price of about $19.50 per barrel for the first half of the third quarter, but dropped to an average of $18.25 per barrel by mid-September due to concerns that OPEC members were cheating on their production quotas. Futures prices for November delivery increased during the last week of the quarter to around $19.50 per barrel in response to OPEC's announcement that their production was much less than was reported and to increased tension in the Persian Gulf. There is a good chance that crude prices will stabilize in the $18-$20 range, at least through 1987.

The Wyoming Board of Land Commissioners sold over half the acres offered at their July and September lease sales. This is the first time back-to-back State sales have sold over 50 percent of the total acres offered since the first two sales of 1986. The July sale had high bids of $477,891 on 47,105 acres with an average bid of $10.16 per acre. The total revenue in this sale was the highest generated since the March 1986 sale. Richard Troost of Casper made the high bid of $125 per acre for a 553.17 acre tract in the Powder River Basin in section 36, T.56N., R.73W. The tract is just north of Collums Field which has oil production from the Muddy Sandstone. Three parcels in this sale drew per-acre bids of $100 or more and 23 drew per-acre bids of $10 or more.

The September State sale received high bids totaling $362,903 on 44,698 acres for an average bid of $8.12 per acre. The top bid of $210 per acre was made by Kennedy Oil of Denver for a 76.63-acre tract in section 7, T.49N., R.67W. in the Powder River Basin. The tract is near Minnelusa oil production at Robinson Ranch South and Thorson Fields. Only the high-bid parcel in this sale drew a bid of $100 or more per acre; however, 20 parcels sold for $10 or more per acre.

The U.S. Bureau of Land Management's (BLM's) August sale generated $1,327,186 in high bids while 16 of the tracts sold for $100 or more per acre. Half of the 16 high-bid tracts were in the Powder River Basin and the other half were in the vicinity of recent Dakota discoveries at Blue Forest and Lincoln road Fields on the Moxa Arch. A total of 21,055 acres in this sale drew bids which averaged $63.03 per acre. The high per-acre bid was submitted by Donald B. Anderson for a 31.32 acre

parcel in section 2, T.55N., R.73W. in the Powder River Basin. The tract is adjacent to Muddy Sandstone oil production from Collums Field. The last two BLM sales have generated more revenue than the six BLM sales in 1986.

A significant discovery by Thermal Exploration was completed in August at Red Bird Field on the southeastern flank of the Powder River Basin. The well, in section 19, T.38N., R.61W., pumped 112 barrels of oil per day from the Jurassic Sundance Formation. The new discovery is approximately 25 miles northeast of the nearest Sundance production, which is at Lance Creek and Lightning Creek Fields.

General Atlantic Energy and Argentia Operating pumped 520 barrels of oil per day from their new Minnelusa discovery in section 27, T.52N., R.69W. The well is about one mile east of Mac Field and one mile west of Breaks Field which both produce oil from the Minnelusa.

The Bighorn Basin may have a new producing oil field. CNG Producing has completed a Tensleep Sandstone discovery in section 10, T.48N., R.91W. about 2 miles southwest of Bonanza Field. No details are yet available on production rates. A north offset to the discovery is not being tested and another north offset is being drilled. Three more locations have been staked in the area by CNG.

Chevron announced it will drill a Madison Limestone test in the Overthrust Belt. The well will be drilled about 30 miles southeast of Jackson in section 11, T.36N., R.115W. The Madison test is also 14 miles southwest of Chevron's noncommercial Frontier gas discovery at the Game Hill unit.

The Federal Energy Regulatory Commission should make a ruling next month on which pipeline will supply natural gas to southern California. The Wyoming Natural Gas Pipeline Authority formed by Governor Mike Sullivan will push for up to $250 million in State financing for the Kern River Pipeline if it is chosen. At least 350 million cubic feet of natural gas per day would be supplied by Wyoming producers if the Kern River Pipeline is built.

Exxon contends that the costs of transporting gas to its Shute Creek Gas Plant and the costs for separating and processing the gas make the gas at the wellhead worthless. Exxon is refusing to make royalty payments to many leaseholders at the present time and is not paying any severance taxes on gas production. The matter is in litigation.

Standard Oil Company of Ohio (Sohio) announced this month that they will close their Casper office by year-end. There are 14 workers in the office as well as 11 oil field workers who report to the office.

Similarly, Amoco Production Company may close its Casper, Evanston, Powell, and Riverton offices. Amoco expects the closures will come in the next one to three years.

In other bad news for the Wyoming petroleum industry, the U.S. Environmental Protection Agency released a draft report in September on the regulation of drilling fluids and produced water. Although the draft does not contain a regulatory determination, it lists costs at three levels of compliance: oil prices will increase by 72 cents to $1.69 per barrel; 0.23 percent to 36.63 percent of all producing wells will be abandoned; Federal lease bonuses and royalties will decline $85.5 million to $325.2 million by the year 2000; and states' severance taxes will fall $190 million to $989 million per year. The draft stated that an average of ten barrels of water is produced for each barrel of oil produced in the lower 48 states. States which have a higher average, such as Wyoming which produces over 13 barrels of water for each barrel of oil produced, will incur the higher compliance costs.

The U.S. House of Representative's Minerals and Mining Subcommittee passed a bill in September to reform the Federal oil and gas leasing system. Under the bill, all leases would be subject to competitive bid and any lease not sold through bidding would be offered to the first interested party for up to a year. If there are no takers, the lease would again be put up for bid. Another section of this bill would bar oil and gas leasing on Federal lands not covered by comprehensive land use plans.

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COAL UPDATE

It is encouraging to note that coal deliveries in the first half of 1987 increased by about two million tons from deliveries made in the first half of 1986. Increased deliveries to Minnesota, Indiana, Iowa, and Louisiana during this period more than offset decreased deliveries to Illinois, Kansas, and Oklahoma. Mines in the eastern Powder River Basin are accounting for nearly all the increased deliveries in 1987. If deliveries in the second half of 1987 surge ahead as they did in the second half of 1986, Wyoming's 1987 coal production should exceed last year's production of 136.3 million tons.

Although production from Powder River Basin coal mines is increasing, the low coal prices and the high level of competition between producers has finally resulted in a mine closure. Kerr-McGee Coal Corporation announced in early October that their Clovis Point Mine east of Gillette would close in early 1988. All the coal company's production would then be shifted to the Jacobs Ranch Mine in southern Campbell County. Coal from Clovis Point is currently shipped to Public Service Company of Oklahoma's Northeastern plant at Oologah, Oklahoma. The mine began production in 1979, reached a production peak of 3.7 million tons in 1981, and produced 1.4 million tons of coal in 1986. Cumulative production through 1986 for Clovis Point is about 16.6 million tons of coal from a State of Wyoming coal lease. Fortunately, the 75 employees at the mine will not be laid off, but will be transferred to the Jacobs Ranch Mine. Because coal from Clovis Point has a delivered heating value of about 8,000 Btu/pound or less (one of the lowest in the Gillette area) and because the mine is served only by the Burlington Northern Railroad, competition with other mines in the area was probably quite difficult.

Several developments at southern Wyoming coal mines occurred in the third quarter of 1987, including the sale of an underground coal mine, a contract extension, and additional layoffs of coal miners. In early September, it was announced that Cyprus Coal Company of Englewood, Colorado, had purchased Carbon County Coal Company's underground mine in the Hanna Basin. The mine, which was a joint venture of Dravo Corporation and Union Pacific Resource Company (formerly Rocky Mountain Energy Company), has been idle and on standby status since early 1986, following the loss of the mine's lone coal contract with Northern Indiana Public Service Company (NIPSCO). Cyprus Coal Company, a subsidiary of Cyprus Mineral Company (formerly Amoco Mineral Group of Standard Oil of Indiana, but now an independent company), operates surface and underground coal mines in Colorado, Utah, Kentucky, Pennsylvania, and Virginia and produces about 13 million tons of coal per year from its mines. The underground mine in Carbon County would be operated as Cyprus Shoshone Coal Company. Cyprus is currently seeking markets for the high quality bituminous coal and would reopen the mine if enough coal contracts could be secured. The mine currently employs 18 maintenance workers and is equipped with a longwall mining system that can produce more than 1.5 million tons of coal per year.

Arch Mineral Corporation, operator of the Seminoe II strip mine in Carbon County, announced in early September that they had negotiated a 15-month extension of their current contract with Kansas Power and Light Company (KPL). However, the current 3 year contract, which was due to expire on December 31st of this year, was amended to reduce the utility's take from 3 million tons to 2.6 million tons. The new contract calls for an additional 812,000 tons of coal. In addition, prices for coal delivered under the current and the extended contract were reduced from 172¢ per million Btu to 131¢ per million Btu and the Btu guarantee increased from 10,800 Btu/pound to 11,000 Btu/pound (McGraw-Hill, 1987a). The new delivered price is an average of $29.54 per ton, or 25 percent less than the current delivered price. Evidently Arch was able to accept the price concessions because of savings made earlier in the year in the form of decreased labor costs (Seminoe II workers took pay cuts) and decreased severance taxes (through a tax break given to high-cost coal producers by the Wyoming Legislature). In addition, rail rates for transportation of the coal to KPL's Lawrence and Tecumseh, Kansas, plants were also reduced. Arch's only other contract, with Iowa Public Service Company, is due to expire in January, 1993.

Although the sale and possible reopening of the Carbon County Coal Company Mine and the extended contract from Arch Mineral Corporation are certainly positive developments in southern Wyoming, two negative developments have offset the optimism. At Black Butte Coal Company's mine east of Rock Springs, it appears that a layoff of both salaried and hourly employees may soon be inevitable. In 1986, the mine produced nearly six million tons of coal and employed almost 500 miners, but because of cutbacks in shipments to Commonwealth Edison's (CE) plants in Illinois, the mine may only produce four million tons in 1987. Nearly all Black Butte's production is contracted to Commonwealth Edison; deliveries for the first half of 1987 confirm that the mine's production is about one million tons less than it was a year ago. The decreased tonnage to CE is thought to be the result of CE's plans to start up and place on-line several new nuclear-powered generating plants, thereby displacing some of their coal-fired capacity.

The other negative development in southern Wyoming was at Arch Mineral Corporation's Medicine Bow Mine west of Hanna. The nine remaining miners at this mine were laid off in July, and the mine was placed on standby. Although this mine did produce a small amount of coal in 1986 and reportedly did ship some coal to Missouri for a test burn this year, the mine has not sold any significant amounts of coal since 1985. In 1978, the Medicine Bow Mine produced 3.1 million tons of coal and employed 225 coal miners. With Medicine Bow now inactive, only two coal mines continue to operate in the Hanna Basin.

In coal transportation news, only one new transportation contract was announced in the third quarter of 1987. Grand River Dam Authority (GRDA), Burlington Northern (BN), and Missouri-Kansas-Texas Railroad (MKT) signed a 15-year contract for coal hauling from Carter Mining Company's coal mines near Gillette to GRDA's power plant complex at Chouteau, Oklahoma. The contract will reportedly save the utility a total of $410 million in freight rates over the length of the contract. Before the contract was signed, the utility company had planned to construct its own 30-mile-long rail spur (from BN's main line) to the power plant in order to reduce freight rates. Work on the spur line stopped when GRDA approved BN and MKT's offer. In a related matter, GRDA and Carter Mining Company are currently renegotiating a coal supply contract under a price reopener clause.

Two utility companies operating the Fayette Power Project near Austin, Texas, are also planning construction of their own rail spur in an effort to save on rail rates. The Lower Colorado River Authority (LCRA) and the City of Austin plan to construct a 20-mile-long, $34.5 million rail spur from the main line of the Southern Pacific Railroad to their generating plant. LCRA currently receives coal from Thunder Basin Coal Company's Black Thunder Mine and Cordero Mining Company's Cordero Mine.

In coal contract news, a short term contract and two spot sales were announced in the third quarter of 1987. Wisconsin Power and Light Company announced the purchase of 550,000 tons of coal from Mobile Coal Producing, Incorporated's Caballo Rojo Mine for the last four months of 1987 and the first seven months of 1988. This coal will be transported by Chicago and North Western Transportation Company (C&NW) and the Soo Line Railroad to the utility's Columbia II generating unit at Portage, Wisconsin. Oklahoma Gas and Electric Company purchased 100,000 tons of spot coal from Thunder Basin Coal Company's Coal Creek Mine. The coal reportedly sold for less than 100¢ per

million Btu's (about $17.00 per ton) delivered, which is from $9.00 to $13.00 per ton cheaper than coal purchased under contract. Finally, LCRA announced a spot purchase of 1.3 million tons of coal from Cordero Mining Company's Cordero Mine. The coal will be delivered via BN and MKT to LCRA's Fayette Power Project Units 1 and 2 during the months of October 1987 through March 1988. The winning low bid for this spot coal was $3.10 per ton F.O.B. the mine. Bids submitted from six Powder River Basin coal producers averaged $4.06 per ton with a low bid of $3.10 per ton and a high bid of $5.05 per ton F.O.B. the mine (McGraw-Hill, 1978b). As these bids demonstrate, coal prices are not improving much, if at all, and competition for coal sales continues to be intense.

Several coal-related economic development projects in Wyoming were of interest in the third quarter of 1987. In early September, the Wyoming Investment Loan Committee awarded two grants totaling $19.7 million from a $30 million fund established by the 1987 Wyoming Legislature to promote clean coal technology or coal enhancement projects. Charfuel of Wyoming, Incorporated, a subsidiary of Carbon Fuels Corporation in Colorado, was awarded $8 million for construction of a demonstration plant at Glenrock that would convert coal to a charfuel (a slurry of coal char and coal liquids) and then burn it in the boiler of a 100-megawatt generating unit. It was earlier reported that Charfuels had received $4 million in grants and loans for the same project from the Exxon Restitution Fund; however, these funds were not awarded by the U.S. Department of Energy after all because the State of Wyoming had not used a competitive procedure to award the funds. Charfuels did reapply for the $4 million under a competitive procedure, but no funds have been awarded yet. The Investment Loan Committee will also consider granting Charfuels an additional $10 million if enough private investors become involved in the project.

The Investment Loan Committee also awarded $11.7 million to Energy Brothers, Incorporated of Denver for construction of a prototype plant that would produce "K-fuel", a coal-based fuel pellet, from coal mined at the Fort Union Mine east of Gillette. The fuel is produced by a patented process that uses both heat and pressure to convert low Btu (8,100 Btu/pound), high moisture (28-30 percent) coal to a 12,180 Btu/pound, low sulfur, low moisture fuel pellet. Evidently Wisconsin Power and Light Company has an agreement with Energy Brothers to purchase the first one million tons of fuel produced.

Energy International, Incorporated (EI) of Pittsburgh, Pennsylvania, had also applied for $21.5 million of the $30 million clean coal/coal enhancement fund, but their request was denied. EI is attempting to secure financial backing to construct a $67 million commercial in situ coal gasification project west of Rawlins. The company received a 3-year, $12 million grant from the U.S. Department of Energy (DOE) in 1986 and in early October of this year signed a contract with DOE for the loan of an additional $11.8 million, subject to final approval by Congress in November. Apparently a substantial amount of private funding has also been secured for the project, which is scheduled to begin commercial production by late 1989.

In a related development, the Investment Fund Committee approved in July the loan of $750,000 to Wyoming Coalbrik, Incorporated from the State's $10 million economic development investment fund. Wyoming Coalbrik began manufacturing a "coal brick" for home heating purposes in early August after moving their factory equipment from Las Vegas, New Mexico, to Rawlins. The company had originally applied for $2 million and had planned to automate their process, but the loan committee decided to let the business operate for at least a year to show that the "coal bricks" could be marketed and that the product worked.

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METALS AND PRECIOUS STONES UPDATE

During the past quarter, Wyoming experienced a mini-boom in precious metals exploration and mining. Activity was reported at many localities in the State with the greatest interest centered at South Pass, the Medicine Bow Mountains, the Bear Lodge Mountains, and the Laramie Range.

In the South Pass region along the southern tip of the Wind River Mountains, prospecting, exploration, and mining operations reached a near fervor by mid-summer. Placer mining and exploration occurred in several drainages within the greenstone belt including Jones Gulch, the Crows Nest, Meadow Gulch, Little Beaver Creek, Wilson Bar, and Rock Creek. Some activity was also reported in the Twin Creek Oligiocene paleoplacers along the northeastern flank of the Precambrian terrain.

Several of the placer operations were centered on Rock Creek, a prominent drainage that runs through Atlantic City and cuts across a thick section of Archean metagreywacke and lesser orthoamphibolite and ultramafic schists, as well as several auriferous shears. At the Stout Mine, about 2 miles southeast of Atlantic City on Rock Creek, stream gravels were averaging about 0.01 ounce per cubic yard gold with a large number of coarse, rough nuggets.

Historically, Rock Creek has attracted many placer miners. In the 1930s, portions of the creek were dredged with favorable results. Based on available records, gold recovery on Rock Creek in the 1930s averaged 0.012 to 0.016 ounce per cubic yard with local areas that ran

as high as 1.0 ounce per cubic yard (Ross and Gardner, 1935; Wilson, 1953). Production from the historical Fisher Dredge on Rock Creek totaled more than 11,500 ounces (Hausel, 1980; 1987a).

East of Rock Creek, gold recovery from a placer operation on Smith Gulch averaged 0.1 ounce per cubic yard during this past summer. The recovered gold was relatively fine with small, flattened nuggets.

At the Mary Ellen Mine near Atlantic City, the Gyorvary Mining Company began expanding its mill and hopes to begin mining in the near future. The company plans to first process the mine dumps, and then to begin mining underground on a small reserve block of 8,000 tons of 0.42 ounce per ton gold ore. The Mary Ellen is a 2400-foot inclined shaft, sunk on a quartz vein, hosted by Archean tonalite.

At the Carissa Mine near South Pass City, the Carissa Gold Mines and Consolidated McKinney Resources joint venture continued working at this once important gold mine. Last January, the joint venture drilled portions of the auriferous shear zone and began dewatering the mine workings this spring. During the summer, the company began work on the surface dwellings and on the ventilation system in the mine. The company is reportedly planning to sample the mine drifts in detail. Based on available information, the Carissa Mine was one of the two most productive lode gold mines in Wyoming (Hausel, 1980).

Gold N' Oil Corporation, a Wyoming company, was actively consolidating their land position in both the South Pass-Atlantic City and Lewiston districts of the greenstone belt during the past quarter. On their Lone Pine claims in the Lewiston district, the company opened a trench and asked the Geological Survey of Wyoming to examine the exposure. The trench cut through a 17-foot-wide mineralized zone which consisted of six feet of chloritized metagreywacke and 11 feet of sheared quartz with hematitic metagreywacke. Channel samples taken across the mineralized zone by the Survey assayed 1.63 ppm gold and 2.99 ppm silver for the 11-foot-wide sheared vein, and 1.6 ppm gold with 2.9 ppm silver for the six-foot-wide chloritized metagreywacke. A four-foot section of the 11-foot sheared vein assayed as high as 3.5 ppm gold and 4.3 ppm silver.

Sampling by the Geological Survey of Wyoming in the historic Tabor Grand Mine in the South Pass-Atlantic City district proved interesting. Samples taken in the sheared orthoamphibolite on the 120-foot-level ranged from 0.05 ppm gold to 58.0 ppm gold. Furthermore, mapping in the accessible workings suggests the possibility that a second, undeveloped, parallel, mineralized shear zone may lie 20 to 30 feet south of the primary shear. Surface mapping has also shown the Tabor Grand shear continues for at least another 500 feet east of the mine portal. At the easternmost extent of the shear, an eight-foot-wide channel sample taken across the width of the shear yielded 3.8 ppm gold and 1.7 ppm silver.

In addition to collecting samples for trace element geochemistry, the Metals Division of the Survey has also been collecting dozens of samples for whole rock chemistry and has been mapping the surface geology of the South Pass greenstone belt at a 1:24,000 scale. A preliminary report on some of these results was recently published by the Wyoming Geological Association in their 38th annual field conference guidebook. Since this report was written (Hausel, 1987a), the Division has been revising Bayley's (1965a, b, c, d) maps in the heart of the greenstone belt by remapping some structurally complex areas and differentiating some new members of the Miners Delight Formation. In addition, a new formation (the Diamond Springs Formation) has been defined along the edge of the greenstone belt, and a gneiss complex has been identified in Bayleys's border zone of the Louis Lake batholith. The new formation consists of serpentinites, talc-tremolite-chlorite schists, metadiabases, and metabasalts with chemistry similar to komatiites and high-magnesian tholeiites.

The Medicine Bow Mountains in southeastern Wyoming were also actively prospected with several family-owned placer operations searching for gold, platinum, and diamonds. Near the southern margin of the Savage Run Wilderness, the Jones Brothers continued to report interesting results on their gabbro-hosted quartz vein. The two-foot-wide quartz vein carries common visible gold and often produces significant assays. For example, a selected sample from the Golden Eagle vein collected by the U.S. Geological Survey during their study of the mineral potential of the Savage Run Wilderness contained 280 ppm (8.16 oz/ton) gold! The Natures Mint vein which lies adjacent and parallel to the Golden Eagle vein produced one sample that yielded 800 ppm (23.3 oz/ton) gold (McCallum and Kluender, 1983)! The Geological Survey of Wyoming recently collected a two-foot-wide channel sample from the Golden Eagle vein that assayed 48 ppm (1.4 oz/ton) gold. One sample of gabbroic host rock collected from the property by the Jones Brothers was tested by the Geological Survey of Wyoming and yielded 6.2 ppm (0.18 oz/ton) gold.

The Douglas, Mullison, and Cortex Creek placers continued to receive some attention throughout the summer. One prospector discovered scheelite near the Keystone Mine along Douglas Creek. This is the first known report of tungsten in that area.

Exploration for platinum and palladium associated with the Mullen Creek and Lake Owens layered mafic complexes continued throughout the summer by at least three major mining firms. All three companies decided to test induced polarization (IP) and geochemical anomalies from earlier exploration activities through exploration drilling. These two large layered mafic complexes were recently examined in a report by Hausel (1987b).

The precious metal exploration activities in the Medicine Bow Mountains overflowed into the adjacent Sierra Madre where companies were searching for primary precious metal deposits and for precious metal deposits dominated by base metals. This region contains many attractive stratabound base metal occurrences (Hausel, 1986).

In the Bear Lodge Mountains of northeastern Wyoming, a major mining company

continued with exploration and development drilling on a Tertiary age, low-grade, gold deposit associated with potassic fenitized alkalic igneous rock. Igneous rocks in the core of the Bear Lodge complex have yielded K-Ar ages of 38 million to 55 million years old (Lisenbee, 1985). The alteration and mineralization is also believed to be Tertiary.

This region also has tremendous potential for thorium and rare earth deposits (King and Harris, 1987). The Bear Lodge complex is believed to have one of the largest resources of rare earths and thorium in the United States (Staatz, 1983). Rare earth deposits are becoming more attractive economically because of their increased use in superconductive materials (King and Harris, 1987).

It was reported by the Vancouver Stock Watch that Caledonia Resources Ltd. was drilling on the Copper King property in the Silver Crown district of the southern Laramie Range (Jim E. Bond II, personal communication, 1987). According to the report, the Copper King is considered to be a bulk minable, disseminated, Proterozoic-age gold-copper deposit with a 600-foot to 700-foot strike length and a 300-foot width. Mineralization continues several hundred feet deep. The early drilling results are encouraging and have intersected mineralized zones ranging from 0.01 ounce per ton gold to 0.177 ounce per ton gold over substantial thicknesses.

The Geological Survey of Wyoming continued sampling in the central and north central Laramie Range for heavy mineral indicators of diamond-bearing kimberlite. More than one dozen anomalous samples were collected in the Elmers Rock greenstone belt, and some samples taken immediately south of the greenstone belt in Sybille Canyon were extremely anomalous and contained several dozen pyrope garnets. The Metals Division is following up with detailed sampling surveys in this anomalous area in an effort to discover the source of the indicator minerals.

Hamilton Mining Company from Sheridan Wyoming, continued to drive an adit during the summer on a relatively wide, sulfide-bearing, quartz vein in the Bighorn Mountains south of Burgess Junction. The vein has yielded values as high as 0.3 ounce per ton gold.

Other activities related to metals in the State included a study of strategic metals. The State of Wyoming has one of the most diverse and significant assemblages of strategic mineral occurrences in the United States. Of utmost importance to our country's security are four critical strategic metals (chromium, cobalt, manganese, and platinum) which have important military and industrial uses. Nearly all of the world's production and known reserves of these metals are controlled by Eastern Block and southern African nations. Based on this recent study, the Geological Survey of Wyoming is optimistic that significant resources may be present in Wyoming (Hausel, 1987b). In particular, the study draws attention to geological similarities of some areas of Wyoming and world-class deposits found in Russia, South Africa, and Zimbabwe.

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## URANIUM AND INDUSTRIAL MINERALS

### Uranium

*In situ* uranium production resumed at the Irigary Ranch property in the Pumpkin Buttes area in early August. This property, developed by Wyoming Minerals Company in the late 1970s, was sold to Malapai Resources Company by Westinghouse Electric Company, the parent company of Wyoming Minerals, in June. Malapai is a wholly-owned subsidiary of Arizona Power. Malapai is developing both the Irigary property and the adjacent Christiansen Ranch property for *in situ* production. Full production is scheduled for 1988. Malapai has announced contracts for uranium oxide deliveries beginning in 1987. Employment in the uranium industry has increased due to the opening of this deposit and the reopening of the Luckey Mc Mill (see below).

Everest Minerals plans to produce contracted uranium oxide from its Highland Mine *in situ* property. Full production from this mine is also scheduled for 1988.

Pathfinder Mines, owned by the French Company COGEMA, continued to mine and mill uranium at Shirley Basin, Wyoming. This mine is Wyoming's only currently-producing uranium mine. Pathfinder-COGEMA has resumed the milling of small amounts of stockpiled ore at the recently renovated Lucky Mc Mill in the Gas Hills district. The Lucky Mc Mine and all others in the Gas Hills district remain shut down. Pathfinder-COGEMA also has been conducting ore grade and mining cost studies at Western Nuclear's Sheep Mountain #1 Mine in the Crooks Gap district.

Surface mining of uranium in Wyoming has apparently been dealt a blow by an increase in taxes levied on mined uranium by the Wyoming Department of Revenue. According to Lee Nugent of Pathfinder-COGEMA, the uranium mining operation at Shirley Basin and their plans to resume production at Lucky Mc are threatened by the increased taxes. Both operations may be forced to close. Nugent believes a study of the new tax rate is needed. The study should assess the effects of the tax rate on the industry's ability to survive.

Cleveland Cliffs, Incorporated has sold its uranium properties in the Pumpkin Buttes district to Uranez, U.S.A., a German-owned uranium-producing company. Getty Mining Company and Edison Development Company are minor participants in the new ownership. No plans have been announced by the new owners to resume development of these properties.

A ruling by the 10th Circuit Court of Appeals has declared that the U.S. Department of Energy must help the domestic uranium industry by processing only U.S. produced uranium in its enrichment facilities. Uranium producers in the U.S. said that this ruling, if not subsequently overturned, could lead to increased domestic uranium production. Currently, U.S. nuclear power plants used 35 million to 40 million pounds of uranium oxide per year, only 10 million pounds of which is produced in the U.S. As of the end of September, no U.S. producer has announced plans to reopen a mine or a mill in response to this ruling.

Bear Creek Uranium, a subsidiary of Union Pacific Mineral Resources, completed reclamation of the Bear Creek Mine in the Southern Powder Basin uranium district in Converse County. The mine closed in 1985 and reclamation began at that time. Since the reclamation work has ended, 81 workers were laid off, with only 37 employees remaining at the site to do upkeep, maintenance, and monitoring work.

The project to move abandoned uranium mill tailings from a site near Riverton to an abandoned mine in the Gas Hills is still on hold. A dispute about the awarding of the contract to Umetco Minerals Company, owned by Union Carbide, is still unresolved. Until this dispute is resolved, the tailings moving project will not proceed. However, the involved contractors anticipate a startup in October of this year if the contract dispute can be resolved.

### Trona

Wyoming's trona mining industry continues to produce at record levels. The 13.3 million tons produced in 1986 was the highest on record, and, according to U.S. Bureau of Mines statistics, the 1987 domestic consumption of soda ash (refined trona) is about five percent above 1986 levels. This record production does not mean that the Wyoming trona mining industry is enjoying good times. Prices are low, and, since there are five trona producers in the Green River area, as compared to four in 1980 when the previous high production levels were being set, the production from each plant is around 80 percent of full production capacity. Production would have to increase by about three million tons to bring the plants to nearly full production.

Workers at General Chemical signed a new contract with the company in July, without a strike threat. Workers, concerned about job security, settled for minimal salary changes. Fifty-one percent of General Chemical is owned by a subsidiary of Allied-Signal (a holding company) and 49 percent is owned by ACI International, an Australian glass producer.

Another purchase of a Wyoming trona plant was made by a French firm. Rhone-Poulenc, S.A., bought a part of Stauffer Chemical Company, including the Big Island trona mine and soda ash refining plant, from the British firm, Imperial Chemical Industries.

The Tg plant is also owned by a French Company, Elf Aquitaine. These sales to foreign firms are not expected to affect soda ash production, exports, or domestic sales. Only the Tenneco and FMC mines and plants are now solely owned by a domestic firm.

Cement

Mountain Cement Company announced a joint venture with Lone Star Industries. Mountain Cement purchased the Laramie cement plant from the Monolith Portland Cement Company in December 1985, and has been modernizing the Laramie plant since then. The venture with Lone Star Industries will provide more capital to the operation and will probably be used to expand the market area for cement produced in Laramie. The plant is scheduled to begin production in 1988.

Domestic cement production is up about five percent over 1986 according to the U.S. Bureau of Mines. This reflects an increase in construction as the economy improves in some areas of the United States.

Gypsum

Regional gypsum production is down about two percent from the relatively high production of 1986. This figure reflects the continued economic stagnation of the energy-producing states. Wyoming's two active gypsum producers, Celotex in Cody and Georgia-Pacific, north of Greybull, produce wallboard for regional consumption. U.S.G. Corporation closed its Heath, Montana, gypsum mine and wall board plant. This closure may improve the market for the two Wyoming plants, so that Wyoming's gypsum production may increase in 1987 and 1988.

Bentonite

Bentonite production in Wyoming may increase in 1987. Bentonite production has declined drastically since 1982 due to the decline in drilling in the domestic oil industry. The primary use of bentonite is for oil well drilling fluid. Exploration and development drilling in the petroleum industry is increasing, and this is bringing about an increased demand for bentonite. This increase is not expected to solve the problems of the depressed bentonite industry. A significant, sustained increase in domestic oil well drilling is needed to cause a recovery in the bentonite mining industry. Wyoming, however, is still the Nation's leading bentonite-producing state.

Phosphate

Operations have stopped at the Leefe, Wyoming phosphate plant, which is owned by Imperial Chemical Industries (ICI), a British firm. It is unclear whether this plant was involved in the Rhone-Poulenc purchase (see Trona) of certain parts of ICI's holdings. Phosphate production continues in Wyoming at Chevron Chemical's Rock Springs plant which uses phosphate mined in Utah and sulfur from Chevron's sour gas refining plant in Wyoming. Nationally, the production of phosphate fertilizer is about the same as 1986, according to U.S. Bureau of Mines statistics.

Sulfur

The production of sulfur from both Frasch processes and that recovered from sour gas is up about six percent from 1986, according to U.S. Bureau of Mines figures. Wyoming's sulfur production is recovered entirely from sour gas.

Price increases have not materialized, however, as worldwide sulfur consumption is down. Long-range prospects for sulfur are good, however, because Canadian sulfur stockpiles are expected to be depleted in a few years.

Pigment

Several tons of iron ore have been shipped from the Sunrise Mine near Hartville for use in pigment. This material was reportedly sent to South America for boxcar paint. This was a test shipment. The owners of the Sunrise property are looking for markets for raw iron ore, fines, and nut-sized material stockpiled on the property. Other potential uses include cement processing and heavy aggregate.

Other Industrial Minerals

In addition to the industrial minerals discussed above, sodium sulfate, construction aggregate (including railroad ballast), limestone used for burn control in coal-fired power plants, and marble are produced in Wyoming. Production of most of these commodities is the same to slightly improved over 1986. Most of these commodities are dependent on local construction and power generation schedules.

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*Minerals and Uranium Geologist*
*Geological Survey of Wyoming*

# Agricultural Outlook

The fall agricultural outlook across Wyoming and the United States is bolstered by high livestock prices and a generally improved outlook. Despite the temporary impact that the sharp drop in the stock market had on all parts of the nation's economy, the basic outlook for almost all sectors of the agricultural economy is improving.

Crops Overview

Expectations for the world's grain crops in 1987-88 have diminished in recent months. Grain production is now expected to be down four percent from 1986-87. Projections for all grain crops were lowered in September, largely because of the growing impact of the drought in southern Asia. Large stocks have cushioned the impact on world trade and prices, however.

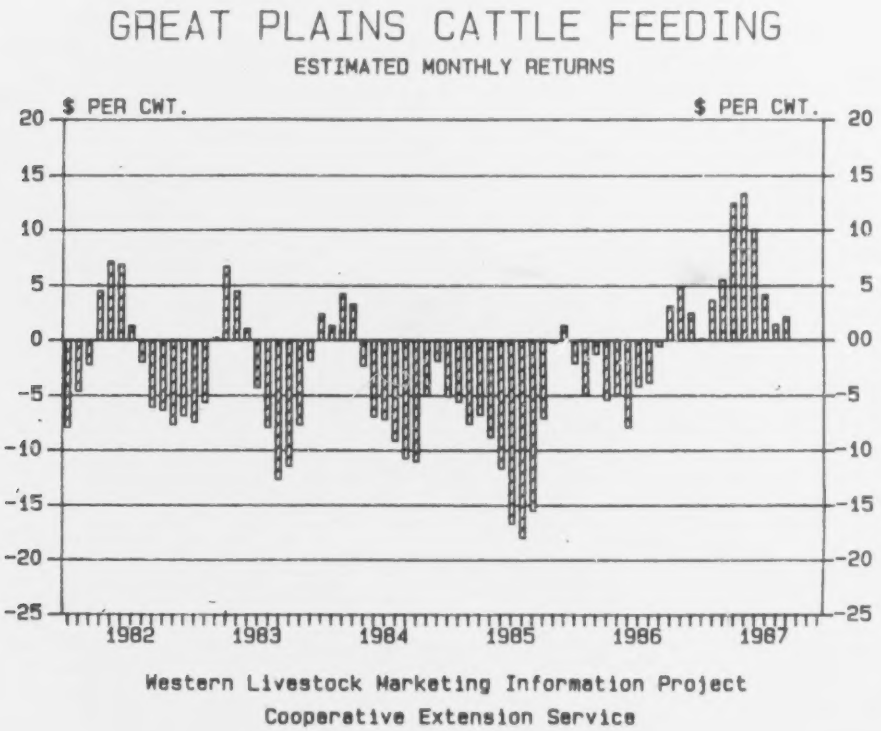
World wheat production is forecast to fall four percent from last year, but the crop is still the third largest on record. This large crop, combined with large carry-in stocks, will ensure continued strong competition and low export prices. However, U.S. exports continue to expand with the assistance of government trade enhancement programs and the weakened dollar.

Although world wheat utilization is down because of less use in the USSR, the USDA has forecast total utilization to exceed production for the first time since 1980-81, and world stocks will drop from the record of 146 million tons in 1986-87.

U.S. wheat production is estimated at 2.1 billion bushels this crop year, up one percent from last year's production level. The harvest as taken from a total of 55.9 million acres, down eight percent from 1986, and the lowest level since 1973. Yields averaged 37.6 bushels per acre, up 3.2 bushel per acre from 1986.

U.S. production of corn for grain is forecast at 7.14 billion bushels, down 13 percent from last year. The estimated yield is forecast at a record high of 119.9 bushels per acre.

Figure 1:



Foreign corn production is likely to be a record 267 million tons. This large production will ensure that feed grain supplies will remain abundant in the coming year, with resulting relatively low prices.

Livestock Situation

Cattle herd liquidation over the last five years has largely ended in 1987, and expansion is not likely to begin until 1988 or 1989. A four percent reduction in beef production in 1987 has already resulted in fed cattle prices rising to an average of more than $6 per cwt above a year ago. These higher prices, plus a 30 percent decline in feed costs, have resulted in a strong demand for the reduced supply of feeder cattle. Prices for stocker-feeder cattle in various weight groups in Wyoming show increases of $12 to $20 per cwt above 1985-86 averages (See Figure 1 on page 11).

Forage conditions this year are good in almost all areas of the U.S., particularly compared with the poor conditions in many places during the recent 1982-86 period. Drought hit much of the southern Great Plains in 1982-84 and the Southeast in the summer of 1986. Drought and poor forage conditions were also troublesome in parts of the West, most notably this past summer in the Pacific Northwest and California.

The beef cow herd has declined nearly 32 million head from the high of 132 million head in 1974. Despite some declines in total acreage of forage available for grazing, the decline in cattle numbers has resulted in substantially more forage available in 1987.

Beef production is expected to decline about four percent in the coming year as producers begin holding more replacement heifers to add to the cow herd. This reduction in beef production will be more than offset by competing meats, however. Poultry production is expected to be up eight percent the last half of 1987, and total poultry per capita consumption, for the first time ever, will surpass per capita beef consumption in the coming year. Pork producers are increasing breeding herds and production in response to higher prices and lower feed costs. The September USDA Hogs and Pigs Report indicated a gain of nine percent in both the breeding herd and market herd from a year earlier. Pork production likely will continue to increase this fall, and prices are expected to decline.

The sheep industry continues to show signs of expansion nationwide. Cumulative commercial mature sheep slaughter for 1987 is down 19 percent from a year ago. This is the third year that mature sheep slaughter has dropped below that of a year earlier; both 1985 and 1986 were 22 percent below the previous year. Wyoming producers are following this national trend, however, a portion of this response has been to rebuild those flocks that were decimated by the late April 1984 blizzard.

Outlook

Because agricultural income in Wyoming is dominated by the sale of livestock and livestock products, the outlook for the remainder of 1987 and into 1988 is very favorable. Livestock prices have rebounded sharply in 1987 and are expected to remain strong throughout the coming year. The two primary factors supporting the higher prices, reduced supply and lower input costs, will not change in the foreseeable future. The nation's cattle herd is expected to continue its decline in 1987, with the January 1, 1988 inventory to reflect around 100 million head, down 2 million head from January 1987. The abundant feed grain supplies will continue to keep input costs low throughout the coming year. The only tempering factor facing beef prices is the rising levels of competing meats.

Average price levels for fed cattle will continue to be marginally higher in 1988 then they were in 1987. Stocker and feeder cattle prices will continue at current levels, with the probability that they will average slightly higher in 1988. There is little on the horizon to indicate that 1987-88 will be a repeat of 1979-80. Cattle prices moved sharply upward in 1979 and then took a nosedive in 1980. A primary reason this should not occur again is that inputs, primarily feed grain costs, should remain low, at least through the fall of 1988.

Sheep and lamb prices will struggle in the coming months to duplicate 1987 levels. Lamb prices in 1988 are expected to be below the high level of 1987. High lamb prices this year were the result of substantially lower production levels. With higher expected production in 1988, choice lamb prices may move $6 to $10 below 1987 levels.

Increased pork supplies will result in lower hog prices this fall and throughout most of 1988. However, continued lower feed costs will aid in keeping most hog producers on the black side of the profit and loss ledger. Poultry production will continue its upward spiral in the coming year and, with increased supplies and lower retail prices, will continue to be a very tough competitor for the consumer's meat dollar.

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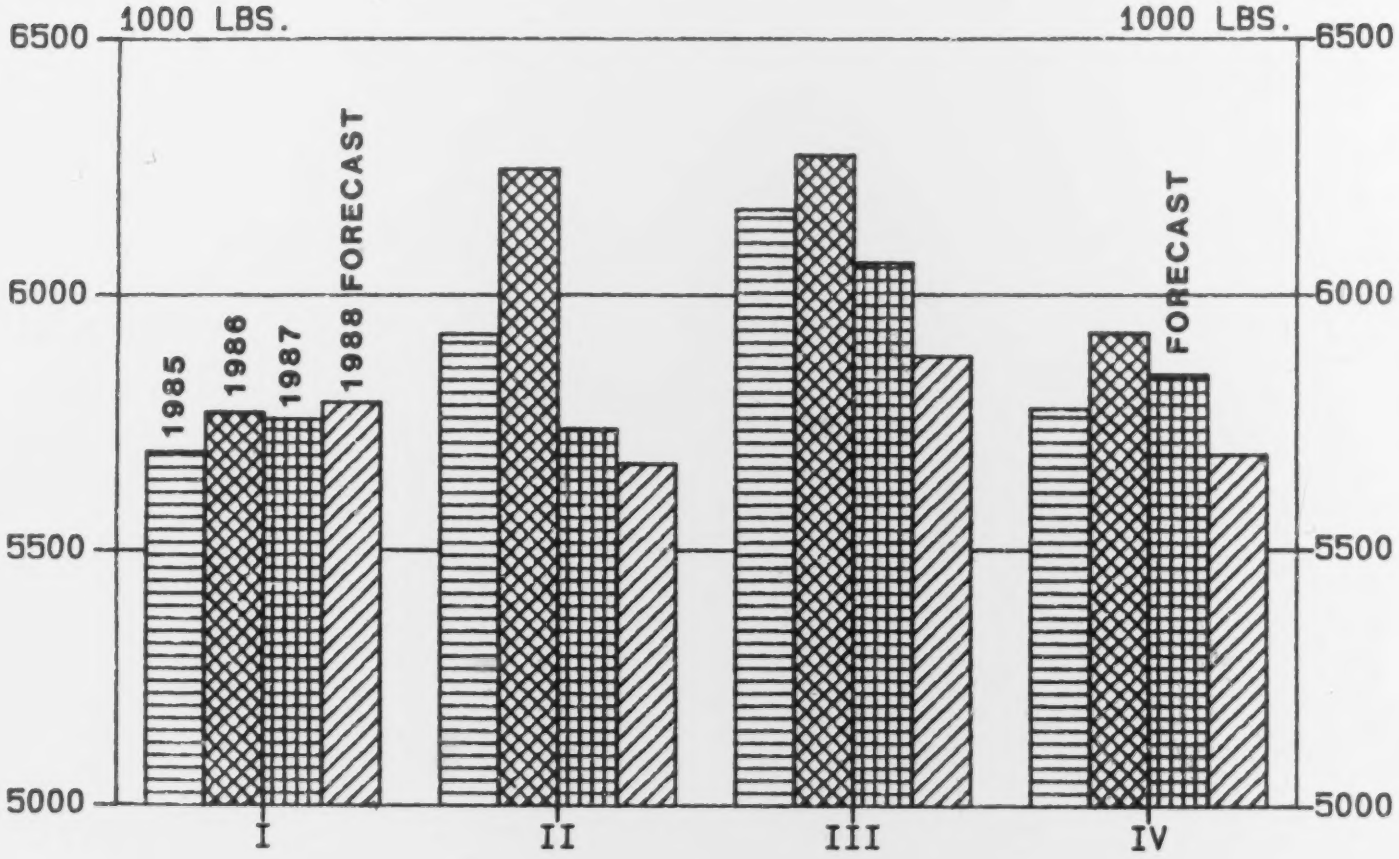
# COMMERCIAL BEEF PRODUCTION

QUARTERLY




Western Livestock Marketing Information Project

Cooperative Extension Service

# Job Openings Outlook

## Registered Nurses

Registered nurses provide health care to injured, sick, and well persons. Regardless of the setting, hospitals, doctors' offices, public health clinics, industrial settings, schools, etc., the nurse has specific duties identified by the nursing process. This process includes the following:

(1) Assessment: Collection of data by interview (subjective) and examination and/or observation (objective), and review of written records and reports (such as lab, x-ray reports, medical information, and directions).

(2) Nursing Diagnosis: Identifying health care needs of the individual, which require nursing intervention or direct care, health teaching, or referral for other aspects of health care. The nursing diagnosis is developed from assessment data.

(3) Planning: Development of a plan of care related to each nursing diagnosis which includes goals. The plan and goals will include support of human functions and responses, maintaining comfort, providing an environment conducive to wellness or the achievement of a dignified death.

(4) Intervention: The implementation of the plan of care which may include carrying out treatment prescribed by a physician, and teaching and supervising patients and families or subordinate health care givers. It also may include operating equipment such as respirators, EKG machines, etc.

(5) Evaluation: The continual appraisal of the effectiveness of the plan in relation to attaining the goals and modifying the nursing diagnosis, plan of care and interventions. This would include observation and evaluation of symptoms. Nurses maintain written records of each patient's condition, care, response to care, and other relevant information. RNs can become advanced nurse practitioners by gaining additional education and knowledge to perform advanced nursing acts and some medical acts in collaboration with a legally authorized physician.

Registered nurses must be licensed by the State Board of Nursing. To obtain a license, applicants must pass a National Council Licensure Examination after completing a state-approved program at a school offering a registered nursing program. There are three major ways of obtaining the required education:

(1) Bachelor's Degree: Requires four to five years of study at a university or college.

(2) Associate Degree: Requires two years and is offered by some community colleges.

(3) Diploma: A three-year training program usually conducted by hospitals.

In addition to the above requirements, preparation that might be helpful for someone thinking of entering this field include: Medical Corps experience in the Army, first aid or EMT course experience, and volunteer or nurse-aide work in nursing homes or hospitals.

The outlook for registered nurses depends on expansion of health care services, extension of prepayment programs for hospitalization and medical care, increased interest in preventive medicine, rehabilitation of the handicapped, home care, and long-term care services. Currently in Wyoming, there is a balance to slight shortage of registered nurses. There is a need for more nurses with baccalaureate degrees. Applicants willing to work part-time or evening and night shifts improve their chances for getting a job. At present, there are about 3,834 resident registered nurses in Wyoming.

Average wages for RNs in Wyoming range from $1,375 to $1,550 per month. Maximum wages are around $2,040 per month. Wages for nurse practitioners vary greatly and may be as much as $2,080 to $2,770 per month.

## Pharmacists

Pharmacists prepare and dispense drugs and medicines prescribed by doctors. Most pharmacists prepare, compound, package, and sell medicines, but some specialize in pure research. Pharmacists learn to recognize and classify hundreds of medicines, many of which are new. They inform customers about the use of the medicines, and advise doctors and other prescribers on the proper selection and effects of drugs. Pharmacists work in hospitals, stores, and labs. Most of their time is spent standing. They usually work over 40 hours a week, which may include evening and weekend duty.

Graduation from a 5-year accredited pharmacy program and licensing are required for employment as a pharmacist. Pharmacists must be licensed by the State Board of Pharmacy. Licensing requirements include:

(1) Age of majority

(2) Completion of a degree in pharmacy from an accredited school

(3) Completion of a 1,500 hour internship, and

(4) Passing the Board of Pharmacy Examination.

Pharmacist interns are required to have two years of pre-pharmacy and at least one year of pharmacy school.

The outlook for pharmacists is favorable, with a slight shortage to shortage of pharmacists practicing in Wyoming. However, there is a surplus of applicants in the Laramie area due to low turnover and the availability of students graduating from the University of Wyoming School of Pharmacy. Currently, there is also a moderate demand for 'relief' pharmacists to substitute for those who work full-time. Approximately 400 pharmacists presently reside in Wyoming; around 300 of those are active and practicing and 100 are not practicing.

The wage rate for pharmacy interns in Wyoming is $5.00 to $7.00 per hour. Entry wages for pharmacists range between $23,000 and $27,000 per year. Pharmacists with experience earn between $27,000 and $39,000 per year. Pharmacists who own or are partners in a pharmacy may earn more. Large amounts of overtime may add significantly to a pharmacist's salary.

For more information, contact the Wyoming Career Information System (WCIS), P.O. Box 3808, University Station, Laramie, Wyoming, 82071. (307) 766-6189.

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# Wyoming Coincident Indicators Index

For the second quarter of 1987, the seasonally adjusted Wyoming Coincident Indicator Index (WCII) dropped slightly from first quarter 1987 levels. However, the seasonally adjusted index has maintained a fairly constant level for the last three full quarters. The low point was reached in August 1986, but for practical purposes, the index is not significantly higher than the low reached at that time. The WCII is derived using several economic variables which tend to coincide with changes in the overall Wyoming economy. It is computed on a quarterly basis by the Division of Research and Statistics, Department of Administration and Fiscal Control.

The WCII is composed of four variables which are: 1) total State employment, 2) total wages reported for the quarter, 3) total sales and use tax collections for the quarter, and 4) an industrial index. The industrial index is a composite index of industrial variables used to represent three of Wyoming's industrial sectors. For the industrial index, mining is represented by the number of active oil well drilling rigs. The agricultural sector is represented by a composite index of prices received for all Wyoming agricultural commodities. The third industry is tourism, which is represented by the total gallons of motor fuels plus gasohol sold each month.

An annual comparison of seasonally adjusted values (second quarter 1986 to the second quarter 1987) shows a decline in three of the four WCII variables. Employment was off three percent, sales and use tax collections by 14 percent; and total reported wages by 11 percent. The industrial index was up eight percent over the level of second quarter 1986. Seasonally adjusted values for all three component variables of the industrial index were up for the year. On an annual basis, the price index for all Wyoming agricultural commodities led the way and was almost 11 percent higher. Total sales of motor fuels and gasohol (in gallons) were up four percent for the year, and the number of active drilling rigs was up slightly. Overall the seasonally adjusted WCII was down two percent from the year before.

On a quarterly basis, the second quarter 1987 seasonally adjusted WCII was down by a scant .4 percent from the first quarter. For the component variables, employment was down three percent, sales and use tax collections were off by less than one percent, and total reported wages declined two percent. The industrial index was up eight percent over the first quarter. The eight percent quarterly increase in the industrial index was led by a 26 percent increase in the number of active drilling rigs. Total sales of motor fuels and gasohol (in gallons) were up nine percent over the previous quarter, and the price index for agriculture commodities was up three percent.

There are a couple points worth reiterating. First, the index has held relatively steady for nine months through June 1987. This may signal a bottoming out plateau. A second point which lends some support to this statement is the fact that the industrial index is up eight percent over both the first quarter and the year ago levels. Furthermore all three component variables for the industrial index are up.

Early signals for the third quarter of 1987 are very similar to the results of the second quarter. If the final data follow these early signals, the WCII should again hold relatively stable at second quarter levels. Specifically, the agriculture commodities price index is up for July and August; the drilling rig count is up for July, August, and September; statewide employment is off for July and August; and sales and use tax collections are off for July, August, and September when compared to 1986 levels.

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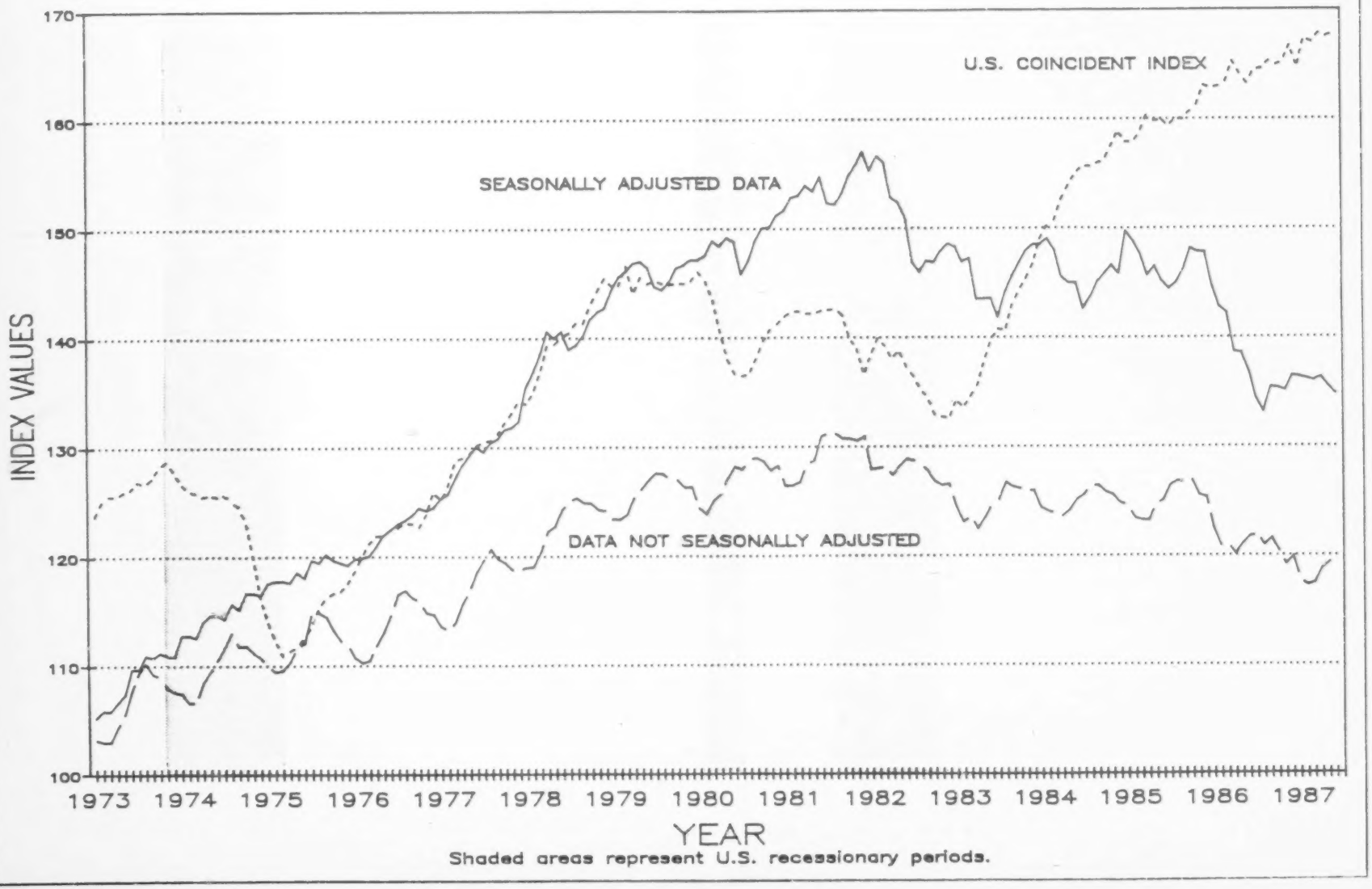
*and Fiscal Control (DAFC)*

# WYOMING COINCIDENT INDICATORS INDEX
## JANUARY 1973 THROUGH JUNE 1987
### OCTOBER 26, 1987




Shaded areas represent U.S. recessionary periods.

# EDUCATION

# Education in Wyoming

Few would deny the value of education in our society today. As we have become more and more technological and as the amount of knowledge has grown, it has become even more imperative that our youth be taught the information necessary to function in whatever contemporary career is chosen.

In 1950, fewer than half of the nation's students graduated from high school. Today that figure is close to 80 percent. In a recent news release from the U.S. Bureau of Labor Statistics, success in the labor market is directly related to education. In March 1987, college graduates had a very low rate of unemployment (2.3 percent) compared to much higher rates for persons with less education. The educational level of the adult labor force (25-64 years old) has continued to rise over the past ten years. One out of four members of the labor force now has a college degree.

| LABOR FORCE STATUS (persons aged 25-64) AND YEARS OF SCHOOL COMPLETED | MARCH 1977 | MARCH 1987 |
|---|---|---|
| Civilian Labor Force Distribution | 100.0 | 100.0 |
| Less than 4 years of high school | 25.0 | 14.9 |
| 4 years of high school | 39.3 | 40.2 |
| 1 to 3 years of college | 15.6 | 19.7 |
| 4 or more years of college | 20.1 | 25.3 |
| Unemployment Rate | 5.7 | 5.7 |
| Less than 4 years of high school | 8.9 | 11.1 |
| 4 years of high school | 5.5 | 6.3 |
| 1 to 3 years of college | 4.9 | 4.5 |
| 4 or more years of college | 2.7 | 2.3 |

Source: U.S. Bureau of Labor Statistics

Presently, the American public has a broadly based concern about the quality of public education and appears to be more willing to provide financial support for educational reforms. Inadequate financial support has been a continual problem for public education; however, state superintendents of public instruction do not believe that adequate funds necessarily ensure effective education. Three-quarters of them do believe the converse, that inadequate funding is a major reason why schools are failing to be as effective as they should be (Mickler, 1987).

By law, responsibility for public education rests with the states, and within each state, with the local governments. In Wyoming during 1985-86, only 1.7 percent of public school revenue came from the federal government, 43.2 percent from the state, and the remaining 55.1 percent from local governments. This article will examine public education in Wyoming: How it is organized, where revenue comes from and how it is spent, the quality of public education, and some of the issues of current interest to those concerned with education.

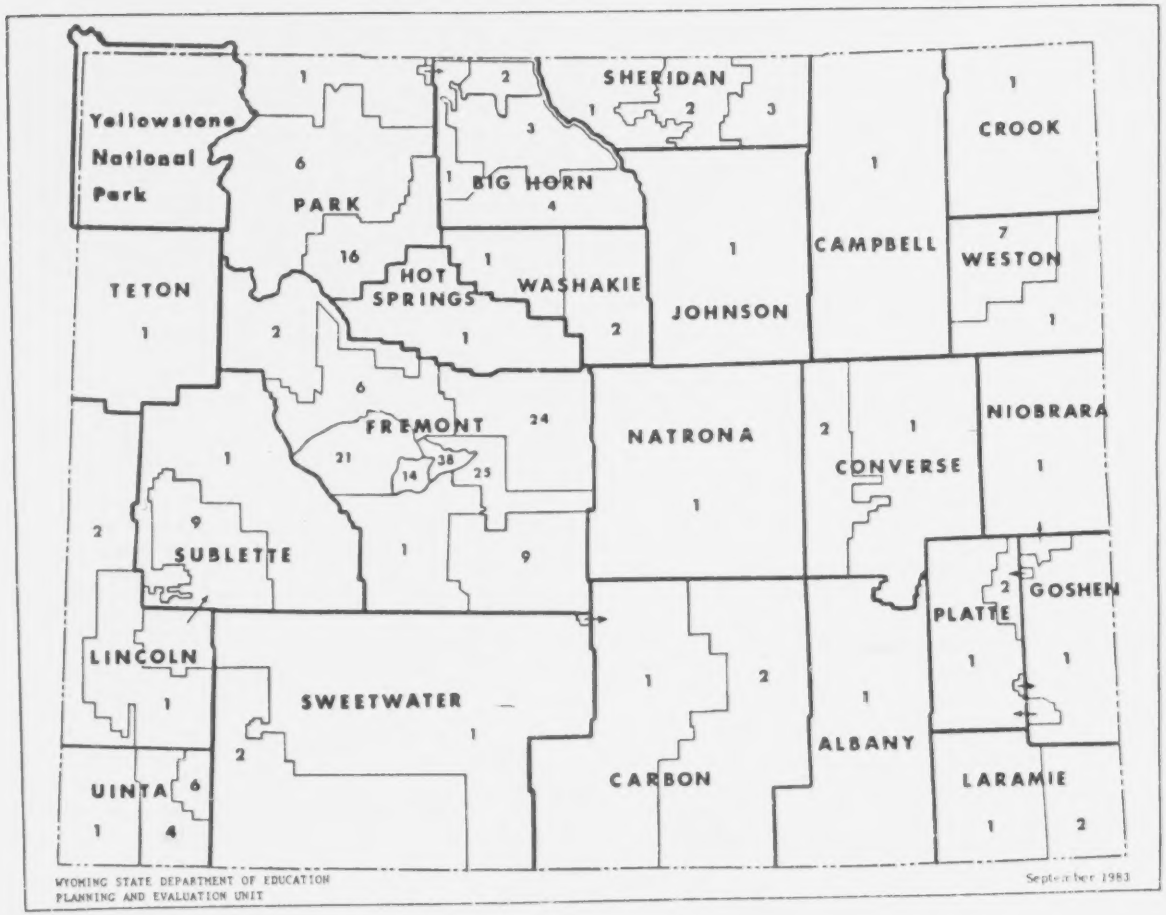
## Organization

Education in the United States has a unique structure. In the 50 states, there are 16,000 independent school districts, each with its own board of citizens which formulates policies and procedures for operation of schools within that district. Some educators are concerned that the school districts are depending more and more on state funding and this may be increasing state control over how these funds are spent. In Wyoming, there are 49 school districts. (See map on page 19.) Almost all of these districts are unified; they offer at least grades kindergarten or one through twelve. The Wyoming Education Code of 1969 requires every district in the State be unified except for several elementary districts on the Wind River Reservation. Each school district is an administrative unit which operates one or more public schools and is governed by an elected board of trustees consisting of five, seven, or nine members serving staggered three-year terms.

There is a strong local control of policy-making, school procedures, and curriculum development. According to Wyoming statutes, "the Board of Trustees in each school district shall: prescribe and enforce rules, regulations, and policies for its own government and for the government of the schools under its jurisdiction," provided these do not conflict with the laws of the State or the rules and regulations of the State Board of Education. This gives the local school districts the advantage of being able to respond to local conditions. In Wyoming, this local control of curricula and policy has not been undermined by

# WYOMING SCHOOL DISTRICTS

ALBANY
1 Laramie
BIG HORN
1 Byron
2 Lovell
3 Greybull
4 Basin
CAMPBELL
1 Gillette
CARBON
1 Rawlins
2 Saratoga
CONVERSE
1 Douglas
2 Glenrock
CROOK
1 Sundance
FREMONT
1 Lander
2 Dubois
6 Kinnear
9 Jeffrey City
14 Ethete
21 Ft. Washakie
24 Shoshoni
25 Riverton
38 Arapahoe
GOSHEN
1 Torrington
HOT SPRINGS
1 Thermopolis
JOHNSON
1 Buffalo
LARAMIE
1 Cheyenne
2 Pine Bluffs
LINCOLN
1 Diammondville
2 Afton
NATRONA
1 Casper
NIOBRARA
1 Lusk
PARK
1 Powell
6 Cody
16 Meeteetse
PLATTE
1 Wheatland
2 Guernsey
SHERIDAN
1 Ranchester
2 Sheridan
3 Clearmont
SUBLETTE
1 Pinedale
9 Big Piney
SWEETWATER
1 Rock Springs
2 Green River
TETON
1 Jackson
UINTA
1 Evanston
4 Mountain View
6 Lyman
WASHAKIE
1 Worland
2 Ten Sleep
WESTON
1 Newcastle
7 Upton



increasing reliance on state and federal funding since more than half of the revenue for public schools comes from local government.

The Wyoming State Board of Education consists of nine members appointed by the Governor with approval of the Senate. At least one member of the board must be a certified classroom teacher and one a certified school administrator. The State Board sets policies for public education and prescribes minimum standards with which public schools must comply. The State establishes the accreditation and certification requirements, as well as minimum standards for school curricula and high school graduation. The State Board of Education may license and establish minimum standards for all trade, correspondence, technical, vocational, business, or other private schools within the State of Wyoming. Parochial, church, or religious schools are exempted from this licensing.

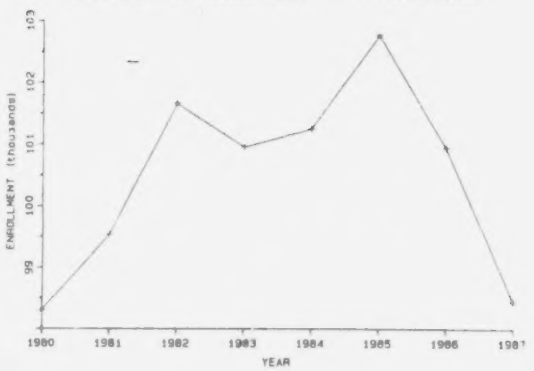
There are approximately 44 private schools in Wyoming with a fall 1986 enrollment of 1992 in grades one through eight, including special education students. Private school enrollments as a percentage of public school enrollment has dropped from 4.4 percent in 1979-80 to 3.1 percent in 1986-87.

Included with figures for the private schools in Wyoming, but not really fitting into that category, is the St. Stephens Indian School on the Wind River Reservation. St. Stephens is a U.S. Bureau of Indian Affairs contract school. This means that the school is run by an all-Indian administration, but is mainly funded by the federal government. According to Louis Headley, Superintendent of St. Stephens, the school also receives some funds from the state and is working to continue that cooperation. There are approximately 350 students in kindergarten through 12th grade at St. Stephens. The school is 95 percent Arapahoe and seeks to preserve the Arapahoe language and culture (A+ Schools, 1985). Both teachers and administrators of the school are certified by the State, and the school itself is accredited through the eighth grade level by the North Central Association.

## Enrollment

In 1890, a Wyoming school census listed over 16,000 public school students, almost half of whom were female. In 1985, Wyoming reached an enrollment of 102,779 public school students. However, statewide school enrollment has experienced several increases and decreases in the 1980s. Some counties have fluctuated more than others, possibly a reflection of the boom and bust cycle of the mineral industry. There has been a general decrease in enrollment in most counties for the past two to three years, except for Laramie, Teton, and Albany Counties which have experienced an increase in enrollment between fall 1985 and fall 1987. In 1986-87, statewide enrollment was down 1.8 percent from the previous year and it is down another 2.5 percent this fall.

SCHOOL ENROLLMENT in WYOMING




For the 1986-87 school year, there were 399 schools in Wyoming: 259 elementary schools, 63 junior high or middle schools, 74 senior highs, and 3 special schools. The full time equivalent classroom teachers numbered 6,272.5 and the average daily membership was 101,099. Average daily membership (ADM) is the aggregate number of pupils present plus the aggregate number of pupils absent, divided by the actual number of days the school is in session for the year. The pupils-to-teacher ratio for the State in 1986-87 was 16.1 The pupils-to-teacher ratio for school districts ranged from 5.5 in Jeffrey City to 19.1 in Cody. This compares to a national average of 18.4. There was a total of 8,294 certified staff employed by the school districts and, of these, 5,103 or 61.5 percent were women.

Enrollments by grade level (Fall 1986):

| | | | |
|---|---|---|---|
| Kindergarten | 9,075 | Seventh | 7,332 |
| First | 9,313 | Eighth | 7,247 |
| Second | 8,652 | Ninth | 7,411 |
| Third | 7,878 | Tenth | 7,602 |
| Fourth | 7,848 | Eleventh | 7,155 |
| Fifth | 7,477 | Twelfth | 6,429 |
| Sixth | 7,417 | Ungraded | 119 |

Total enrollment 100,955
(Includes 9,564 special education students).

The greater number of students in the elementary grades as compared to secondary grades can be explained only in part by dropout rate or by age distribution. There are more children aged 6 to 13 in the state than those aged 14 to 18. This may be due in part to the adult age distribution in Wyoming, which ranks as one of the states with the youngest average age (35 percent of the population in 1985 was between the ages of 25 and 44 years old, compared to a national average of 30.9 percent). This may be due to the large influx of young adults into the state during the peak energy production period of several years ago.

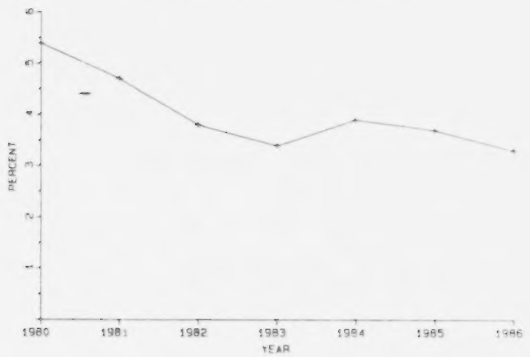
One concern among school administrators is the number of students who do not finish their secondary education. Reliable estimates of the numbers of students who drop out of school are difficult to obtain because many students who drop out later re-enter school or obtain a high

school diploma outside of school through a general equivalency diploma (GED). However, the Department of Education estimates that 12 to 21 percent of the students in Wyoming will not graduate from high school. These dropouts cause economic and social problems for themselves and for Wyoming and the nation. They are more likely to be unemployed and, even if employed, to be at the lower end of the economic scale. Over seventy percent of the persons in correctional facilities are dropouts. The majority of families on public assistance are headed by persons who dropped out (Wyoming Department of Education, 1987b).

According to a National Education Association/Gallup Opinion Poll of the general public and K-12 teachers, our educational system is not at fault for the dropout problem. The majority of those surveyed perceive the dropout situation as a family situation. However, they also feel that the schools should take an active role in dealing with the problem. The action thought most effective in dealing with dropouts is to combine the efforts of home and school and to have more parental involvement in education, as well as smaller class sizes (National Education Association, 1987).

In Wyoming, the dropout rate has been steadily dropping since the 1978-79 school year. At that time, the dropout rate was 6.0 percent. It was 3.3 percent for the 1986-87 school year.

DROPOUT RATE in WYOMING




In considering the dropout rate, it is important to also look at the dropout rate by grade level. The overall rate includes grades 7 through 12, but often there are fewer dropouts in grades 7 and 8 compared to grades 10 and 11. In 1986-87, the rate was as follows:

| Grade | Percent |
|---|---|
| 7 | 0 |
| 8 | .2 |
| 9 | 3.0 |
| 10 | 5.5 |
| 11 | 5.0 |
| 12 | 5.5 |

If the dropout rate is figured for grades 9 to 12 only, it equals 5.0 percent.

Nevertheless, Wyoming has one of the lowest dropout rates in the nation. According to Lynn Simons, State Superintendent of Public Instruction, "There appears to be a correlation between higher unemployment and a lower dropout rate." (Casper Star-Tribune, Nov. 18, 1983.) It may be that the employment situation in Wyoming has contributed to the lower dropout rate, but the problem is complex and cannot be explained by any one factor. (See comparison maps on page 22.)

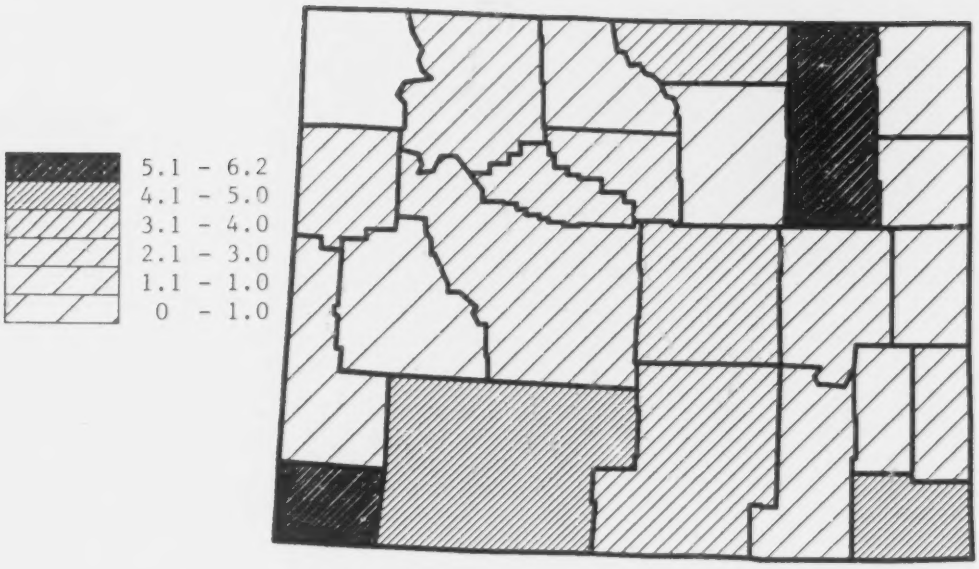
## Revenues

Public school funds come from a variety of sources. Historically, financing public education has been shared by both state and local governments. Beginning in 1892, the Common School portion of the Land Income Fund was given by the state to the schools. In 1935, a formula was adopted for distributing "equalization funds" requiring a minimum local district tax levy for qualification. During the forties, a fund was set up for general aid to the schools and the statewide six-mill property tax was enacted. In 1955, the State School Foundation Program was established. This plan brought together all of the previous state-aid measures and guaranteed each school district a minimum amount per classroom unit according to a formula. The formula is based on "the need, the effort, and the ability of each district to support its schools." (Wyoming Department of Education, 1985b.)

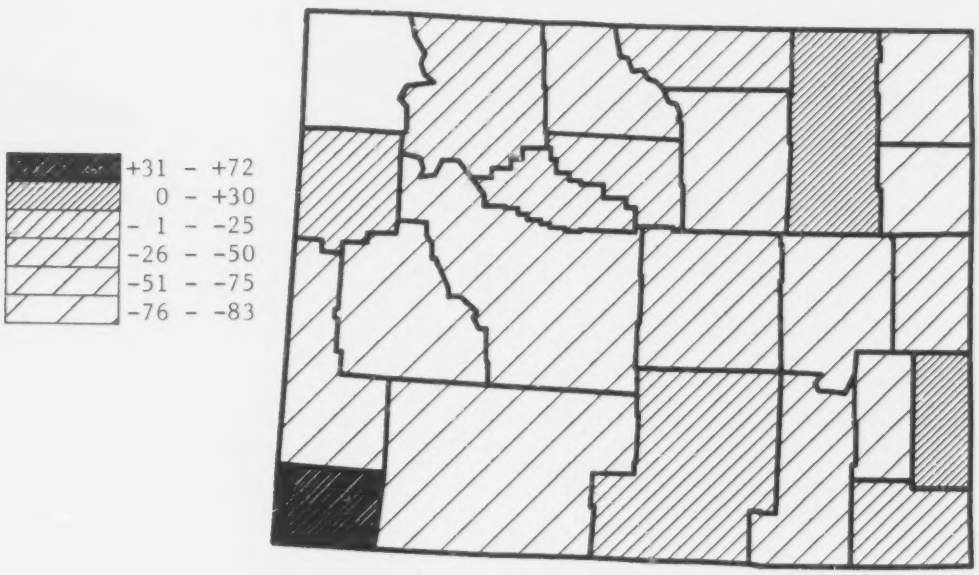
A general reorganization and restatement of financing for public education in Wyoming was enacted as the Wyoming Education Code of 1969. Throughout the 1970s and up to the present, the Wyoming Legislature has made changes and modifications in the Education Code. These modifications include major changes in funding and equalization; increases in state and decreases in county mill levies; establishment and later modifications of fund recapture from wealthier school districts; modified school district mill levies; changes in values and divisors for classroom units; and reimbursements for resource room teachers, vocational education, and special education.

The chart on page 23 itemizes the numerous local, county, state, and federal sources of revenue for education in Wyoming. The main source of revenue for local government in Wyoming is property tax. In 1986, 72.5 percent of the property tax revenues went for public schools. Property taxes include taxes on real property valuation, personal property valuation, and properties valuated by the State Board of Equalization. Although property taxation is normally less volatile than other taxes, in Wyoming mineral taxes are a major part of the property tax base and, therefore, local tax yields are highly dependent on mineral production. The yield from any property tax is more dependent on the assessed valuation of that property than on the amount of the levy. In 1986, assessed valuations were down 8.49 percent or $48 million. These decreases resulted from reduction in the valuation of minerals which declined nearly eight percent in 1986. Due to a year's delay in the effect of lower mineral production on property valuation, there was a further decrease of 35.1 percent in mineral valuations in 1987.

Dropout Rate (percent) in 1986-87




Percentage Change in the Dropout Rate from 1980-81 to 1986-87



# STATE SUMMARY: GENERAL FUND REVENUES 1985-86

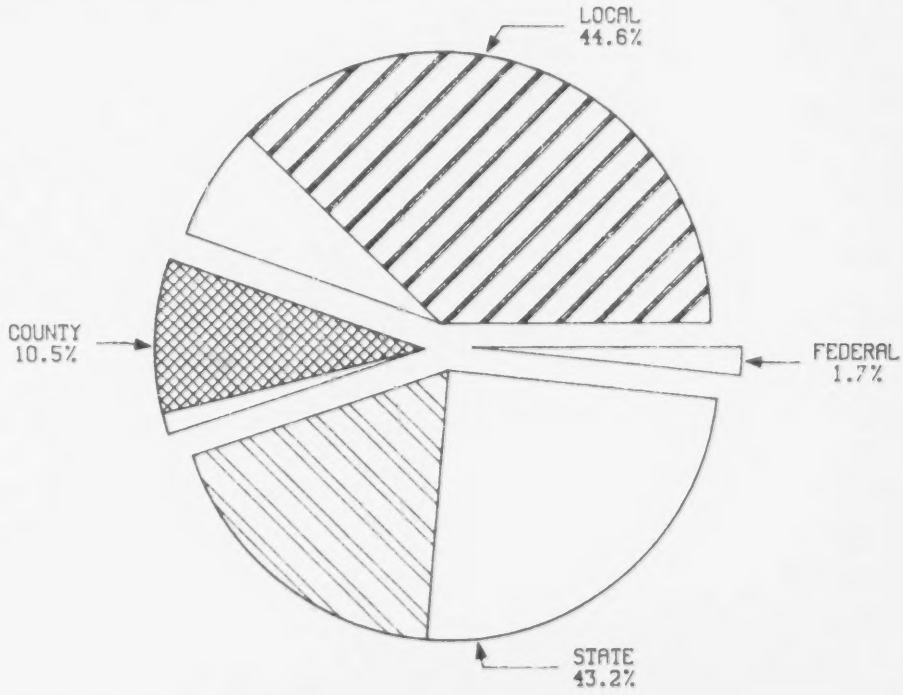
| LOCAL SOURCES | | % |
|---|---|---|
| 25 or 20 Mills, Special District Tax | $205,803,142 | 37.9 |
| 1 Mill, Authorized by Board | 3,831,737 | .7 |
| 5 Mills, Tuition Tax | 194,988 | * |
| Motor Vehicle Tax | 9,469,350 | 1.7 |
| Car Company Tax | 263,027 | * |
| Delinquent Tax | 1,962,720 | .4 |
| BOCES | 364,442 | .1 |
| Other Local Tax | 652,902 | .1 |
| In-State Tuition/Regular | 1,002,463 | .2 |
| Out-of-State Tuition/Regular | 746,366 | .1 |
| Adult Education | 73,561 | * |
| Summer School | 76,040 | * |
| Cooperative Programs | 236,844 | * |
| Tuition/Handicapped | 182,485 | * |
| Transportation Fees | 66,624 | * |
| Interest & Dividends | 11,267,861 | 2.1 |
| Other Food Service | 125,542 | * |
| Admissions, Pupil Activity | 139,599 | * |
| Other Pupil Activity | 303,522 | .1 |
| Rental, School Facilities | 370,773 | .1 |
| Contributions & Donations | 1,252,251 | .2 |
| Sale of Fixed Assets | 368,612 | .1 |
| Compensation for Losses | 1,605,120 | .3 |
| Refund of Prior Year's Expenditures | 409,680 | .1 |
| Miscellaneous | 943,723 | .2 |
| Total Local | $241,713,360 | 44.6 |

| COUNTY SOURCES | | |
|---|---|---|
| 6 Mills, County Tax | $ 50,092,830 | 9.2 |
| Motor Vehicle Tax | 2,281,433 | .4 |
| Car Company Tax | 62,665 | * |
| Delinquent County Tax | 368,908 | .1 |
| Fines & Forfeitures | 3,904,150 | .7 |
| Forest Reserve | 73,716 | * |
| Other County | 329,977 | .1 |
| Total County | $ 57,113,680 | 10.5 |

| STATE SOURCES | | % |
|---|---|---|
| Foundation Program | $188,049,557 | 34.7 |
| State Land Income | 45,479,681 | 8.4 |
| Taylor Grazing | 298,917 | |
| Other State | 407,987 | |
| Total State | $234,236,138 | 43.2 |

| FEDERAL SOURCES | | |
|---|---|---|
| Public Law 874 | $ 9,080,738 | 1.7 |
| Other Federal | 130,557 | * |
| Restricted Grants-in-Aid | 144,189 | * |
| Total Federal | $ 9,355,485 | 1.7 |

| | |
|---|---|
| TOTAL GENERAL FUND REVENUES: | $542,418,661 |
| Transfers In | 795,275 |
| Revenues Plus Transfers In | $543,213,936 |

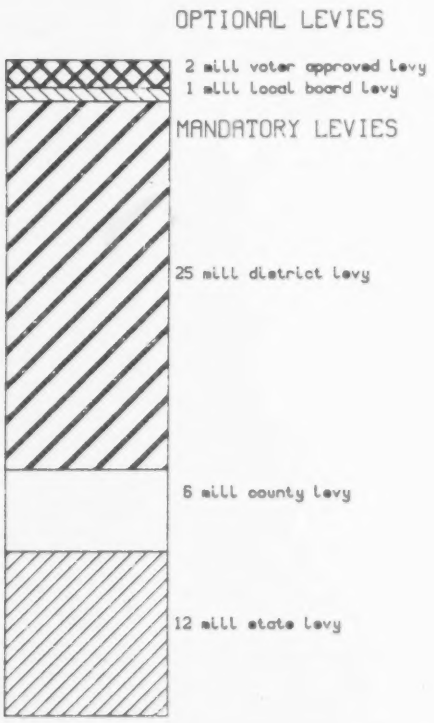



Shaded Areas Show Real Property Taxes

* Less than .1%

Source: Wyoming Department of Education, Statistical Report Series, No. 3, 1987.

Local and County Revenues: The graph below shows the variety of taxes which are levied on property to support public education.




SOURCE: Wyoming Department of Education, 1985

Local tax levies for public education include a mandatory 25 mills on the assessed valuation of all property within a school district which is subject to taxation for public education. There is, in addition, a mandatory six mill county levy. Each county is required to levy a tax of six mills on each dollar of assessed valuation of property for the support and maintenance of the public schools in that county. This is considered a local revenue in computing the entitlement due from or to the State Foundation Program. The county mill levy funds are collected by the county treasurer and distributed among the school districts within the county.

Each unified school district has the option to levy an additional three mills. One mill can be levied with the annual approval of the Board of Trustees and two mills can be levied with the approval of the majority of the voters. A provision in the law assures that any districts imposing the one mill levy is not penalized in its entitlement from the State.

Other local sources of revenue include land income funds, fines and forfeitures, forest reserve, Taylor Grazing Act receipts, motor vehicle fees, and tuition receipts. The funds are collected by either the State or the county, distributed to the county treasurer, and reallocated to the school districts. The exception to this is tuition, paid to a school district for educating students who live outside the district. Seventy-five percent of this money is counted as a local resource.

At the time that Wyoming became a state, 3.5 million acres of land (two sections per township) were set aside for support of public schools. This land cannot be sold for less than 3/4 of its assessed value and, if sold, mineral rights are to be retained. Any proceeds from sale of the land and mineral royalties are placed in the Common School Account within the Permanent Land Fund. Interest from this fund and proceeds from rentals and leases on the school lands constitute the Common School Land Income Account which is distributed twice a year to county treasurers, then redistributed to school districts on the basis of their average daily membership of the year before.

Wyoming School Foundation Fund: The School Foundation Program "is the minimum of educational services and facilities which is to be made available to each district from the required local effort and the public School Foundation Program account." The purpose of the fund is to provide "a guaranteed minimum financial support level for public education and to help equalize educational opportunity through the reallocation of financial resources from districts with a high per pupil tax base to those with a low per pupil tax base." (Wyoming Department of Education, 1985.)

There are several sources of State Foundation Fund revenues. All State money earmarked for elementary and secondary education has been placed in the Foundation Fund by the Legislature, except for money from the Land Income Fund which is distributed directly to the school districts.

Historically, the largest source of income for the State Foundation Fund has been the mineral royalties paid to the State by the federal government. When Wyoming became a state the federal government retained the mineral rights on State lands. Fifty percent of these mineral royalties are returned to the State and of this fifty percent, thirty-four percent are paid into the Foundation Fund. In 1983, a statewide 12 mill levy was enacted. These revenues go into the Foundation Fund and are now its largest single source of fund revenues.

Other sources of State Foundation Fund revenues are small amounts from motor vehicle taxes, railroad car company taxes, and interest on the investment of the Foundation Fund. In addition, some .8 percent of the State General Fund revenues went to elementary and secondary education in fiscal year 1986. Revenue sources available to support education through the State General Fund include receipts from retail sales and use taxes, liquor sales, cigarette tax, insurance companies tax, and inheritance taxes.

The recapture of funds from wealthier school districts is also a source of School Foundation Program revenues. Each school district is entitled to a given number of classroom units (CRUs) based on a formula. The CRU is the unit for measuring the minimum education needs of a school. Each school is assured it will have at least one CRU. The method for calculating CRUs is weighted by a system of divisors that allows a smaller number

of students per CRU in smaller schools. The Legislature sets the current value for a CRU ($74,000 in fiscal year 1986 and $75,040 in fiscal year 1987) and this value times the total number of CRUs equals the school district's total operating cost for classroom units. To this figure are added certain other costs and this constitutes the total operating cost for each school district. The additional costs added to the CRU operating cost are three fourths of the school's transportation costs, a portion of the capital outlay for buses, tuition, homebound, isolation (reimbursement to pupil's living in remote areas of the district for private transportation), certain special education costs, and adjustments from the previous year. The amount of money derived from these costs is not a real amount of money, nor is it all payable to a given district. This is a calculated amount credited to the district. From this amount is subtracted the amount of income each district receives from taxes. For those districts where the balance is negative, School Foundation Program funds are paid to the district. In districts where local resources are high, little or no aid is paid from the Foundation Fund. In districts where the local resources are greater than 125 percent (109 percent for the 1987-88 school year only) of the School Foundation Program costs, the excess is recaptured, i.e., paid by the school district into the Fund. Recapture amounts are limited by two sections of the law, but currently no district, even at full recapture, approaches this Constitutional limitation.

In fiscal year 1987, forty-one school districts received varying amounts of state support. Five districts paid excess revenues to the Foundation Fund and three districts neither received funds nor sent funds to the State. In the 1986-87 school year, the estimated support per ADM to school districts from both local and state resources ranged from $4090 to $9518. Table 2 (see page 26) shows the dollars of support per ADM for the school districts for the past two school years.

Federal: Only 1.7 percent of the revenues for public education came from the federal government in fiscal year 1986.

Bonds: The Board of Trustees of a school district may submit to the voters a bond issue to supply funds for capital outlays. There is a limit on outstanding indebtedness of ten percent of the assessed value of the taxable property therein. In the fiscal year 1986, the school district bonded indebtedness ranged from zero to almost 100 percent of the bonding capacity. The state total of school district bonded debt as of June 30, 1986 was $208,951,660.

Revenues for public education in Wyoming come from a variety of sources and the total picture is somewhat difficult to visualize. However, it is important to remember that funding for public education is dependent on property valuation and both the local and state economic conditions. Currently, public education in Wyoming is experiencing a shortfall in revenues, as are most state and local government units. Assessed valuation per student in unified school districts varied from $17,073 to $517,937 in 1986. The average for the State was $77,456, a decrease of 7.54 percent from 1985. The State Foundation Program works to equalize public school funding among the counties.

## Expenditures

The State Superintendent of Public Instruction and the Wyoming Legislature must work together to clarify and implement the State's responsibility for public education. Perception of what education must achieve has expanded while fiscal resources have diminished. The challenge is how to achieve new goals and maintain present services and also cut the budget.

Expenditures of the State Department of Education include the following programs and services (1985-86 proportions of state budget in parentheses):

1. Services to the deaf including the operation of the School for the Deaf and services to deaf children enrolled in district schools (18%).
2. Services to both blind youth and adults through five field offices in Rawlins, Thermopolis, Casper, Riverton, and Sheridan (14%).
3. Capital construction in the districts and the School Foundation Program (funds for both go to the districts on an entitlement basis).
4. Administrative services including the State Superintendent's expenses (14%).
5. Directive services to the districts including instructional inservice, curricular planning, vocational program assistance, fiscal technical assistance, certification and accreditation, and all monitoring activities (54%). (Wyoming Department of Education, 1985a.)

The budgets for the school districts can be divided into several program categories (percentages given are for the 1985-86 school year). Instruction relates to the actual on-going educational programs in the district. Costs for instruction include supplies and salaries applicable to the classroom teaching situation and extra-curricular activities. For the 1985-86 school year, 55.1 percent of the school district general funds were spent on instruction. Instructional support, 9.2 percent of general fund expenditures, can be defined as the services of special and technical personnel in the areas of media, health, guidance and counseling, etc. This includes all costs and salaries. General support, which includes administration, operations and maintenance, transportation, and food service received 29.8 percent of the general funds. Community support was a small part of the budget, only .2 percent, and relates to district non-school activities such as community recreation, civic activities, community welfare, and others. Payments to the State Foundation Program equaled 4.9 percent and capital outlay was .8 percent.

Viewing the expenditures by object one gets the following breakdown: salaries 58.7 percent, benefits 15.0 percent, purchased services 10.4 percent, supplies/materials 5.6 percent, capital outlay 5.0 percent, and other objects 5.2 percent. The total general fund expenditures for the State were $532,928,112 for the 1985-86 school year (Wyoming Department of Education, 1987c).

Table 2:

## SCHOOL FOUNDATION PROGRAM

### Total Dollars of Support Per ADM

[Support consists of Local Resources Plus Entitlement, Less Recapture (if any) -- 1986-87 Figures are Preliminary]

| COUNTY District | 1985-86 Support/ ADM | 1986-87 Support/ ADM | Percent Change |
|---|---|---|---|
| ALBANY | | | |
| 1 Laramie | 4590 | 4699 | 2.36 |
| BIG HORN | | | |
| 1 Byron/Cowley | 6156 | 6290 | 2.19 |
| 2 Lovell | 4504 | 4669 | 3.67 |
| 3 Greybull | 5201 | 5393 | 3.70 |
| 4 Basin | 5971 | 6270 | 5.00 |
| CAMPBELL | | | |
| 1 Gillette | 5648 | 5477 | -3.03 |
| CARBON | | | |
| 1 Rawlins | 5488 | 4606 | -16.06 |
| 2 Saratoga | 6126 | 6358 | 3.78 |
| CONVERSE | | | |
| 1 Douglas | 4350 | 4417 | 1.53 |
| 2 Glenrock | 5482 | 6225 | 13.55 |
| CROOK | | | |
| 1 Sundance | 6178 | 6106 | -1.16 |
| FREMONT | | | |
| 1 Lander | 4411 | 4485 | 1.67 |
| 2 Dubois | 6617 | 7280 | 10.01 |
| 6 Kinnear | 6051 | 5978 | -1.21 |
| 9 Jeffrey City | 8322 | 8525 | 2.44 |
| 14 Ethete | 6100 | 6154 | 0.88 |
| 21 Ft. Washakie | 6604 | 7223 | 9.38 |
| 24 Shoshoni | 7287 | 6823 | -6.37 |
| 25 Riverton | 4230 | 4315 | 1.99 |
| 38 Arapahoe | 8022 | 7077 | -11.79 |
| GOSHEN | | | |
| 1 Torrington | 5624 | 5657 | 0.59 |
| HOT SPRINGS | | | |
| 1 Thermopolis | 6183 | 5872 | -5.03 |
| JOHNSON | | | |
| 1 Buffalo | 5244 | 5260 | 0.30 |
| LARAMIE | | | |
| 1 Cheyenne | 4132 | 4205 | 1.77 |
| 2 Pine Bluffs | 7250 | 7054 | -2.70 |
| LINCOLN | | | |
| 1 Kemmerer | 4698 | 4422 | -5.88 |
| 2 Afton | 4664 | 4639 | -0.53 |
| NATRONA | | | |
| 1 Casper | 4034 | 4090 | 1.38 |
| NIOBRARA | | | |
| 1 Lusk | 5981 | 5789 | -3.21 |
| PARK | | | |
| 1 Powell | 4498 | 4484 | -0.31 |
| 6 Cody | 4061 | 4211 | 3.71 |
| 16 Meeteetse | 8672 | 9050 | 4.35 |
| PLATTE | | | |
| 1 Wheatland | 5138 | 5140 | 0.04 |
| 2 Guernsey | 5907 | 5931 | 0.41 |
| SHERIDAN | | | |
| 1 Ranchester | 5871 | 6190 | 5.43 |
| 2 Sheridan | 4118 | 4128 | 0.23 |
| 3 Clearmont | 9385 | 9518 | 1.43 |
| SUBLETTE | | | |
| 1 Pinedale | 5456 | 5016 | -8.07 |
| 9 Big Piney | 6229 | 5335 | -14.36 |
| SWEETWATER | | | |
| 1 Rock Springs | 4546 | 4325 | -4.87 |
| 2 Green River | 4510 | 4097 | -9.15 |
| TETON | | | |
| 1 Jackson | 5007 | 5076 | 1.38 |
| UINTA | | | |
| 1 Evanston | 5236 | 5052 | -3.52 |
| 4 Mt. View | 4987 | 4816 | -3.44 |
| 6 Lyman | 4434 | 4380 | -1.23 |
| WASHAKIE | | | |
| 1 Worland | 4492 | 4544 | 1.16 |
| 2 Ten Sleep | 8666 | 8849 | 2.12 |
| WESTON | | | |
| 1 Newcastle | 4589 | 4509 | -1.76 |
| 7 Upton | 5637 | 5789 | 2.70 |
| STATE | 4811 | 4770 | -0.85 |

Source: Wyoming Department of Education, 1987a

In January 1987, the State Board of Education and the State Department of Education viewed revenue shortfall as the major problem facing Wyoming education. Although school enrollment has dropped recently, assessed valuations, and therefore property tax revenues, have dropped even faster. (See Table on page 10). According to the Wyoming Taxpayers Association, 1986 marked a significant departure from a 20-year trend in assessed valuations and resulting tax levies. The assessed valuation of taxable property in Wyoming decreased 6.66 percent or $558,441,838 in the tax year 1986, resulting in a decrease of 8.49 percent or $48 million in tax levies. For 1987, there was an even more significant decrease in assessed valuations and resulting tax levies. The assessed valuation of taxable property decreased 23.7 percent or $1,858,024,855 between 1986 and 1987. The resulting decrease in tax levies was 20.5 percent or $106 million. The most significant decrease was in mineral production which dropped over $1.9 billion in assessed value.

Table 3:

| | TOTAL TAXES LEVIED (T$) | | | FALL ENROLLMENT | | |
|---|---|---|---|---|---|---|
| | 1986 | 1987 | Percent Increase (Decrease) | 1986 | 1987 | Percent Increase (Decrease) |
| Albany | 6,871 | 7,012 | +2.1 | 4,063 | 4,147 | +2.1 |
| Big Horn | 11,614 | 7,208 | (-37.9) | 2,658 | 2,536 | (- 4.6 |
| Campbell | 98,214 | 77,244 | (-21.4) | 7,750 | 7,892 | (- 1.8) |
| Carbon | 27,111 | 20,423 | (-24.7) | 4,075 | 3,972 | (- 2.5) |
| Converse | 24,544 | 16,712 | (-31.9) | 3,004 | 2,797 | (- 6.9) |
| Crook | 10,113 | 5,560 | (-45.0) | 1,219 | 1,190 | (- 2.4) |
| Fremont | 27,347 | 18,929 | (-30.8) | 7,561 | 7,474 | (- 1.2) |
| Goshen | 3,880 | 3,829 | (- 1.3) | 2,464 | 2,387 | (- 3.1) |
| Hot Springs | 11,489 | 6,604 | (-42.5) | 1,148 | 1,095 | (- 4.6) |
| Johnson | 7,464 | 5,430 | (-27.3) | 1,375 | 1,329 | (- 3.3) |
| Laramie | 16,929 | 17,765 | (- 4.9) | 13,853 | 13,885 | (- 0.2) |
| Lincoln | 21,247 | 20,495 | (- 3.5) | 3,799 | 3,678 | (- 3.2) |
| Natrona | 30,194 | 25,393 | (-15.9) | 13,316 | 12,670 | (- 4.9) |
| Niobrara | 2,916 | 2,399 | (-17.7) | 555 | 555 | 0 |
| Park | 37,107 | 22,571 | (-39.2) | 4,631 | 4,551 | (- 1.7) |
| Platte | 8,738 | 8,377 | (- 4.1) | 1,940 | 1,865 | (- 3.9) |
| Sheridan | 11,177 | 8,618 | (-22.9) | 4,720 | 4,705 | (- 0.3) |
| Sublette | 9,536 | 10,033 | +5.0 | 1,398 | 1,252 | (-10.4) |
| Sweetwater | 77,781 | 75,253 | (- 3.3) | 10,220 | 9,915 | (- 3.0) |
| Teton | 4,981 | 5,296 | + 5.9 | 1,745 | 1,790 | +2.5 |
| Uinta | 55,600 | 37,191 | (-33.0) | 5,759 | 5,470 | (- 5.0) |
| Washakie | 6,256 | 4,956 | (-20.8) | 2,108 | 1,985 | (- 5.8) |
| Weston | 6,620 | 4,370 | (-34.0) | 1,594 | 1,515 | (- 5.0) |
| State | 517,728 | 411,707 | (-20.5) | 100,955 | 98,445 | (- 2.5) |

Twenty-one counties had reductions in assessed valuation ranging from Lincoln County at -1.4 to Crook County with -45.4 percent. Only two counties experienced an increase in valuation: Albany at +1.1 percent and Teton with +.8 percent. Tax levies also decreased, as would be expected, in nineteen counties. Four counties had increases of two percent to six percent (Albany, Laramie, Sublette, and Teton).

As mentioned previously, 72.5 percent of the taxes levied went to public education in 1986. School and college property tax spending was reduced 9.22 percent in 1986 and schools also levied significantly less money for bonds and interest for that year (Wyoming Taxpayers Association, 1986). Figures for 1987 are not yet available.

In January of 1987, the State Department of Education feared that the School Foundation Program would face a shortfall of $113,650,416 for fiscal year 1988 and likely shortfalls in FY89 and FY90. However, due to higher than expected property tax valuations and a drop in statewide school enrollment, the projected shortfall as of October has dropped to $31 million. The State Education Department had expected to spend $235 million on the schools through the School Foundation Program, but has lowered that figure to $210 million. This is only the amount that the School Foundation Program will spend on the schools, not what local school districts will spend from their local revenues. Plans are being brought forward by the Legislative Joint Education Committee, to reduce spending and transfer revenues to cover the shortfall, but no plans are definite as yet. The state must both recognize and respond to decreasing state revenues and yet continue a commitment to quality education for Wyoming.

Quality

According to a survey done by the Natrona County School District recently, parents would prefer to pay more for their children's education than see school budget cuts. Of the parents surveyed, 88 to 92 percent would be willing to pay more for their children's school supplies, etc. and 70 percent felt that even if further state cuts are necessary, the district budget should not be cut (Schulte, 1987b).

In a 1986 Gallup Opinion Poll of the general public and teachers, public school teachers ranked as the profession which contributes the most to society (out of nine professions ranging from engineers to pharmacists). Those surveyed viewed teaching as a complex, demanding, and socially beneficial profession. They also felt (89%) that teaching has become more difficult over the past ten years (National Education Association, 1987).

In their 1987 Annual Report to the State Legislature, the State Board of Education and State Department of Education declare: "It is exceed their present quality." The jobs which will be available to American children of today "will require citizens who are well-educated, highly literate, flexible, innovative, and entrepreneurial. Our schools must do more than they presently are to assure such a citizenry for tomorrow." The state's commitment to education will also have an effect on the economic development so vital to Wyoming in this time of economic decline. "The priority we give education... demonstrate(s) vividly whether Wyoming is a good place for businesses, and the families they bring, to settle and work (Wyoming Department of Education, 1987a). Wyoming ranks third in the nation for per capita spending on education. About one-third of total state expenditure in the United States was for education in 1986, according to the U.S. Census Bureau. About nineteen percent of that went to other governments (i.e. local and school district) for their public education needs. In 1986, Wyoming spent $918.93 per capita on education. Of that amount, $335.75 went to higher education.

Table 4:

Wyoming's Ranking Among the States[1] in Public Elementary and Secondary Education

| | Rank | Average Wyoming | Average U.S. |
|---|---|---|---|
| Pupils in Average Daily Membership Per Teacher, Fall 1986 | 43 | 14.05 | NA[2] |
| Pupils Enrolled Per Teacher, Fall 1986 | 50 | 14.03 | 17.77 |
| Estimated Average Salaries of Public School Teachers, 1986-87 | 13 | 28,103. | 26,551. |
| Estimated Average Salaries of Instructional Staff, 1986-87[3] | 19 | 28,230. | 27,711. |
| Public School Revenue Per Pupil in Average Daily Attendance, 1986-87 | 2 | 7,565. | 4,386. |
| Estimated Current Expenditures per Pupil in Average Daily Attendance, 1986-87 | 2 | 6,253. | 3,983. |
| Estimated per Capita Expenditure for Education, 1986[4] | 3 | 918.93 | 583.03 |
| Estimated per Capita Expenditure for Higher Education, 1986 | 6 | 335.75 | 215.51 |
| Estimated Percent of Revenue from Local Governments, 1986-87 | 12 | 56.32 | 43.58 |
| Estimated Percent of Revenue from State Government, 1986-87 | 36 | 41.07 | 50.14 |
| Estimated Percent of Revenue from Federal Government, 1986-87 | 51 | 2.61 | 6.28 |

[1]Includes District of Columbia
[2]Data not available for six states
[3]Instructional staff includes consultants, principals, teachers, guidance, personnel, librarians, and others
[4]Source: U.S. Department of Commerce, Bureau of the Census, 1987.
Source for all other data: National Education Association Research, 1987.

Wyoming has traditionally held a high regard for education, as evidenced by the giving of land in 1892 to finance public education. However, maintaining quality is an on-going process. There may be many measures of educational quality, among them how Wyoming students do on national achievement tests. According to the most recent American College Testing (ACT) test scores, Wyoming students scored higher than the national average. Overall Wyoming scores rose slightly for the fourth year to 19.9 while the national average edged downward to 18.8. Scores are reported on a scale of 1 to 36. Students who take more core curriculum classes such as English, math, social science, and natural science do better than students taking fewer such classes.

ACT TEST SCORE AVERAGES

| | Wyoming | U.S. |
|---|---|---|
| "Core or More" Curriculum | 22.2 | 20.8 |
| Fewer Core Curriculum Courses | 18.1 | 16.9 |

"Core or More" curriculum is defined by ACT as four years of high school English, three or more years each of math, social science, and natural science. These are the areas tested by ACT.

***

Table 5 (see page 30) shows Wyoming's ranking among the states in some areas of public elementary and secondary education.

Wyoming has a low pupils-to-teacher ratio, high per pupil expenditure, and fairly high teacher salaries. As mentioned before, however, funding alone does not ensure quality education. Nor does lowering funding improve the situation.

In a study done by several University of Wyoming graduate students, it was shown that the type of management and instructional practices used in a school can affect student achievement (Robinson, 1984). The Blue Ribbon Committee on Quality Education in Wyoming (1984) defined several areas where student preparation could be strengthened to prepare the students for changes in society and technology. Computer literacy and other skills and knowledge related to math and science need to be incorporated into the curriculum and higher level thinking skills need to be fostered.

Quality in education comes from the concern and effort by school personnel, parents, and other citizens of Wyoming. Funding alone will not solve problems, but a lack of funding will certainly handicap those working toward maintaining quality in public education in Wyoming. An understanding of the public education system is essential to making informed choices about this important matter.

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1985b. The Wyoming School Foundation Program.

1987a. Annual Report to the State Legislature on Wyoming School Foundation Program. Wyoming State Board of Education and Wyoming Department of Education, January 1, 1987

1987b. Children at Risk: Roadblocks to Achieving Potential/Eliminating the Barriers.

1987c. Statistical Report Series.

1987d. Wyoming Education Code of 1969 as Amended - 1987.

Wyoming Taxpayers Association
1982. Wyoming Taxpayers Association Presents It's Your Money.

1986. Wyoming Property Taxation.


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*CRIS/IPR*

Table 5: Education

| Years | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|---|
| 1. Assessed Property Valuation for Wyoming (Millions of Dollars) | 6,176. | 8,101. | 7,937. | 7,962. | 8,389. | 7,831. |
| 2. Wyoming Total Property Taxes Levied (Millions $) | 398. | 525. | 544. | 544. | 566. | 518. |
| 3. Public School Enrollment | 99,541. | 101,665. | 100,965. | 101,261. | 102,779. | 100,955. |
| 4. Assessed Valuation Per School Enrollee ($) | 63,583. | 81,935. | 79,106. | 79,938. | 83,772. | 77,456. |
| 5. FTE Classroom Teachers[1] | 5,697.8 | 5,969.0 | 6,076.0 | 6,235.5 | 6,306.5 | 6,272.5 |
| 6. Pupil/Teacher Ratio | 17.5 | 17.0 | 16.6 | 16.2 | 16.3 | 16.1 |
| 7. Public School Drop-out Rate (%) | 4.7 | 3.8 | 3.4 | 3.9 | 3.7 | 3.3 |
| 8. Enrollment, University of Wyoming (UW) | 9,635. | 10,210. | 10,270. | 10,096. | 10,109. | 10,008. |
| 9. UW Graduate Degrees Conferred | 435. | 465. | 454. | 471. | 529. | 472. |
| 10. UW Bachelor Degrees Conferred | 1,328. | 1,387. | 1,487. | 1,608. | 1,653. | 1,625. |
| 11. UW Withdrawal Rate[2] | 6.9 | 5.9 | 6.6 | 5.7 | 6.1 | 5.9 |

[1]FTE: Full time equivalent.
[2]Students withdrawing divided by enrollment times 100.

Sources: Series 1, 3-7: State Department of Education, Statistical Report Series.
Series 2: Wyoming Taxpayers Association, Wyoming Property Taxation.
Series 8-11: University of Wyoming, Annual Statistical Summary of the Division of Registration and Records.

# ECONOMIC CHANGES

ECONOMIC CHANGES

(Editor's Note: The purpose of this section is to point out areas of the Wyoming economy in which noteworthy changes occurred or in which existing trends were significantly accentuated, during the latest reporting period.)

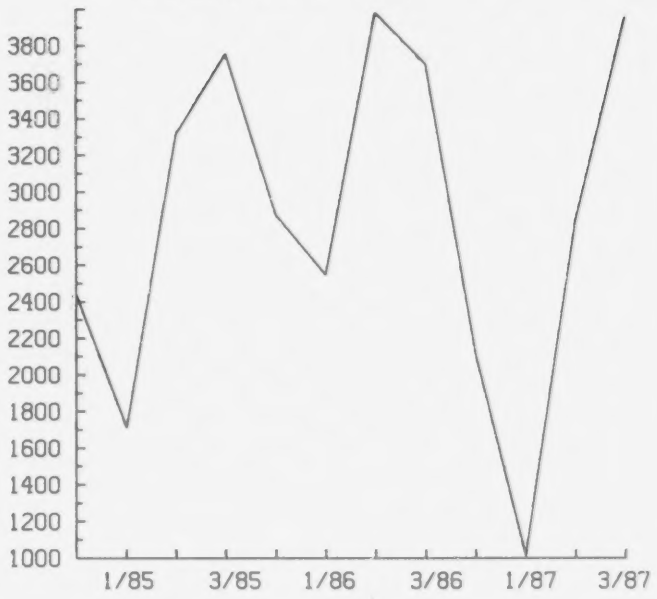
Highlights of the third quarter of 1987 included the active rig count, the number of building permits issued, and the unemployment rate.

The Wyoming active rig count was 47 for the third quarter of 1987. This is the highest it has been since the first quarter of 1986 when it was 57. At the same time, daily Wyoming oil production hit a twelve quarter low of 308,000 barrels.

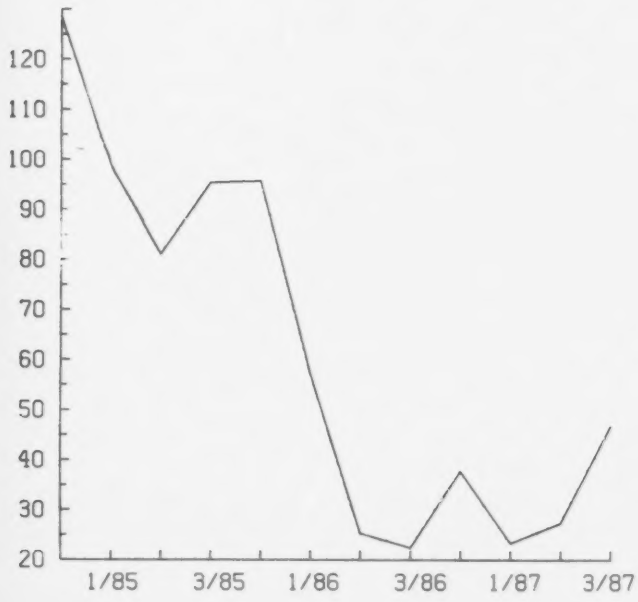
The unemployment rate dropped to 6.6 percent this past quarter. This continues the downward trend of the second quarter (8.1 percent). Both the civilian labor force and numbers of persons employed rose slightly the third quarter of 1987, while the number of initial unemployment insurance claims dropped by 28 percent from the second quarter of 1987.

The number of building permits issued in Wyoming has continued an upward trend from the twelve quarter low reached during the first quarter of 1987. The number of permits issued was 3953 compared to 3698 for the third quarter of 1986 and 1015 for the first quarter of 1987. The total number of new residential dwelling units, the value of residential units constructed, and the value of authorized construction were also up for this past quarter.

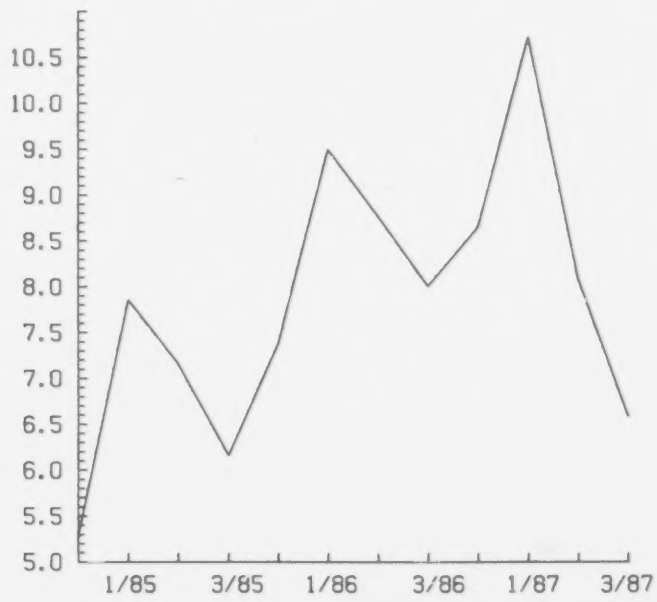
Building Permits Issued




Active Rig Count




Unemployment Rate



# WYOMING DATA

Table 6 Agriculture[1]

| Calendar Quarters | 4/84 | 1/85 | 2/85 | 3/85 | 4/85 | 1/86 | 2/86 | 3/86 | 4/86 | 1/87 | 2/87 | 3/87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Timber Cut in Wyoming National Forests (MBF) | 63055. | 23591. | 6564. | 35705. | 57834. | 27236. | 10067. | 10867. | 42510. | 47783. | 25572. | 20299. |
| Price Indices[2] (1967=100) | | | | | | | | | | | | |
| 2. Wyoming Crops, Prices Received-Latest | 255. | 257. | 260. | 255. | 248. | 241. | 222. | 216. | 208. | 205. | 209. | 212. |
| 3. Wyoming Crops, Prices Received-Average | 253. | 254. | 261. | 258. | 252. | 245. | 232. | 219. | 212. | 205. | 205. | 212. |
| 4. U.S. Crops, Prices Received-Latest | 240. | 246. | 237. | 215. | 226. | 214. | 209. | 187. | 191. | 194. | 215. | 203. |
| 5. U.S. Crops, Prices Received-Average | 251. | 243. | 241. | 222. | 220. | 214. | 216. | 195. | 191. | 190. | 206. | 198. |
| 6. Wyoming, All Commodities, Prices Received-Latest | 248. | 253. | 239. | 241. | 222. | 236. | 224. | 248. | 238. | 264. | 268. | 288. |
| 7. Wyoming, All Commodities, Prices Receive1-Average | 249. | 254. | 248. | 240. | 231. | 237. | 233. | 241. | 244. | 253. | 273. | 270. |
| 8. U.S. All Commodities, Prices Received-Latest | 247. | 246. | 239 | 220. | 233. | 223. | 222. | 223. | 221. | 223. | 240. | 236. |
| 9. U.S., All Commodities, Prices Received-Average | 249. | 247. | 238. | 224. | 229. | 224. | 222. | 227. | 223. | 221. | 235. | 233. |
| 10. Wyoming Livestock, Prices Received-Latest | 246. | 252. | 233. | 237. | 215. | 235. | 225. | 257. | 246. | 282. | 285. | 310. |
| 11. Wyoming Livestock, Prices Received-Average | 247. | 254. | 244. | 235. | 225. | 235. | 233. | 247. | 253 | 267. | 293. | 288. |
| 12. U.S. Livestock, Prices Received-Latest | 253. | 246. | 234. | 224. | 240. | 231. | 234. | 256. | 248. | 249. | 262. | 265. |
| 13. U.S. Livestock, Prices Received-Average | 249. | 251. | 236. | 226. | 239. | 233. | 229. | 255. | 252. | 249. | 261. | 263. |
| 14. Prices Paid by U.S. Farmers-Average | 332. | 332. | 332. | 328. | 330. | 324. | 326.[3] | 324. | 321. | 327. | 331. | 336. |

[1] First time readers of WQU should refer to the "Format" page (in back) for an explanation of abbreviations and table formats.
[2] The index for the last month (latest) of each quarter, along with the average of the three monthly indices of each quarter.
[3] This figure is for the month of April. This index is now reported in the months of January, April, July, and October.

Sources: Series 1: United States Forest Service. "Timber Cut and Sold, Convertible Products." Region 2 and 4 reports published quarterly.
Series 2-15: Wyoming Crop and Livestock Reporting Service. Bi-weekly Ag Statistics.

Table 7: Banking and Finance

| Calendar Quarters | 4/84 | 1/85 | 2/85 | 3/85 | 4/85 | 1/86 | 2/86 | 3/86 | 4/86 | 1/87 | 2/87 | 3/87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Total Bank Loans and Leases Financing Receivables (T$) | 2352704. | 2356267. | 2348277. | 2296857. | 2226477. | 2173437. | 2108551. | 2066324. | 2003375. | 1932753. | 1931400. | 1779168. |
| 2. Total Bank Deposits (T$) | 4005456. | 3808654. | 3908435. | 3959810. | 4048702. | 3908134. | 3797038. | 3787785. | 3912276. | 3741328. | 3740737. | 3688191. |
| 3. Total Non-Interest-Bearing Deposits (T$) | 742392. | 652223. | 643908. | 687128. | 689811. | 624421. | 620064. | 611410. | 638317. | 559803. | 591011. | 582741. |
| 4. Savings and Loan Mortgage Loans (T$)[1] | 806660. | 780644. | 806897. | 949722. | 929668. | 826697. | 817750. | 811230. | 787910. | 810354. | 812614. | 794162. |
| 5. Savings and Loan Deposits (T$) | 1142593. | 1161848. | 1193339. | 1183564. | 1166220. | 1139851. | 1137374. | 1137155. | 1148406. | 1120110. | 1104107. | 1104332. |
| 6. Prime Interest Rate[2] | 11.06 | 10.50 | 9.78 | 9.50 | 9.50 | 9.10 | 8.50 | 7.50 | 7.50 | 7.50 | 7.94 | 8.70 |

[1]Only members of the Federal Home Loan Bank Board are included. Indicates amount at the end of the quarter.
[2]Rate is for the last available month of the quarter.

Sources: Series 1-3: Wyoming State Bank Examiner Quarterly Report.
Series 4 and 5: Federal Home Loan Bank of Seattle, Monthly Report. Comparative statistical analysis of member institutions.
Series 6: U.S. Department of Commerce, Bureau of Economic Analysis. Survey of Current Business. Published monthly.

Table 8: Business Conditions

| Calendar Quarters | 4/84 | 1/85 | 2/85 | 3/85 | 4/85 | 1/86 | 2/86 | 3/86 | 4/86 | 1/87 | 2/87 | 3/87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. New Domestic Corporations | 273. | 308. | 307. | 248. | 283. | 308. | 301. | 262. | 307. | 256. | 270. | 267. |
| 2. New Foreign Corporations | 244. | 224. | 259. | 279. | 217. | 251. | 223. | 189. | 217. | 206. | 232. | 259. |
| 3. Total New Corporations | 517. | 532. | 566. | 527. | 500. | 559. | 524. | 451. | 524. | 462. | 502. | 526. |
| 4. Business Failures | 68. | 70. | 78. | 58. | 72. | 74. | 83. | 89. | 64. | 47. | 72. | 56. |
| 5. Value of Business Failures ($) | 12763251. | -25485776.[1] | 23761569. | -2394988.[1] | 8266910. | -933393.[1] | -2898465. | 7242872. | 12405831. | 2935220. | 5896578. | 5918282. |
| 6. Personal Bankruptcies | 183. | 176. | 204. | 229. | 211. | 238. | 321. | 288. | 340. | 333. | 359. | 301. |

[1]Assets exceed liabilities.

Sources: Series 1-3: Secretary of State. New and Foreign Corporations. Monthly report.
Series 4-6: Cheyenne Credit Bureau. Wyoming bankruptcy cases, business failures, and value of failures. Weekly publication.

Table 9: Construction

| Calendar Quarters | 4/84 | 1/85 | 2/85 | 3/85 | 4/85 | 1/86 | 2/86 | 3/86 | 4/86 | 1/87 | 2/87 | 3/87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. New Residential Dwelling Units | 368. | 380. | 725. | 628. | 511. | 287. | 544. | 494. | 317. | 270. | 464. | 744. |
| 2. Value of Residential Dwellings Constructed (M$) | 23.0 | 24.3 | 50.1 | 42.3 | 33.9 | 19.5 | 33.4 | 33.0 | 21.6 | 17.6 | 34.5 | 59.4 |
| 3. Value of Nonresidential Construction (M$) | 80.0 | 33.0 | 75.8 | 31.6 | 17.1 | 14.2 | 38.7 | 51.3 | 9.2 | 6.8 | 39.7 | 23.0 |
| 4. Building Permits Issued in Selected Wyoming Cities | 2438. | 1713. | 3315. | 3753. | 2872. | 2547. | 3979. | 3698. | 2112. | 1015. | 2841. | 3953. |
| 5. Value of Authorized Construction (T$) | 35282. | 23474. | 83920. | 193451. | 15695. | 21484. | 49454. | 38669. | 20453. | 9083. | 23444. | 24258. |
| 6. Mortgage Interest Rate[1] | 12.05 | 11.42 | 11.31 | 10.69 | 10.47 | 10.01 | 9.74 | 9.74 | 9.43 | 8.93 | 8.96 | 9.03 |

[1]Conventional first mortgage for new home purchase. U. S. average for last month of quarter.

Sources: Series 1-3: F.W. Dodge Division of McGraw-Hill. "Dodge Local Construction Potentials." Published monthly.
Series 4-5: Institute for Policy Research. "Local Construction Reports." Survey of authorized construction in selected cities conducted monthly.
Series 6: U. S. Department of Commerce, Bureau of Economic Analysis. Survey of Current Business. Published monthly.

Table 10: Consumers

| Calendar Quarters | 4/84 | 1/85 | 2/85 | 3/85 | 4/85 | 1/86 | 2/86 | 3/86 | 4/86 | 1/87 | 2/87 | 3/87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. New Truck Registrations | 4574. | 3581. | 4052. | 5187. | 3915. | 3343. | 3650. | 3951. | 2993. | 2253. | 3155. | 3011. |
| 2. New Car Registrations | 3397. | 3012. | 3752. | 4868. | 3177. | 3200. | 3804. | 4181. | 2784. | 2211. | 3171. | 3332. |
| 3. Wyoming Personal Income (M$) | 6383. | 6368. | 6639. | 6644. | 6732. | 6719. | 6673. | 6359. | 6187. | 6126. | 6335. | INA |
| 4. U.S. Disposable Income (B$) | 2724. | 2739. | 2818. | 2800. | 2846. | 2935. | 3010. | 3038. | 3062. | 3126. | 3131. | 3194. |
| 5. U.S. Personal Income (M$) | 3181312. | 3252416. | 3298321. | 3330251. | 3399408. | 3455709. | 3523766. | 3548335. | 3590277. | 3660342. | 3705169. | INA |
| 6. Latest U.S. Consumer Price Index (1967=100)[1] | 312.2 | 315.3 | 318.7 | 320.5 | 323.4 | 321.4 | 323.0 | 324.9 | 325.7 | 330.5 | 334.9 | 339.1 |
| 7. Quarter's Average U.S. CPI | 312.1 | 313.9 | 317.7 | 319.7 | 322.4 | 323.0 | 321.6 | 327.1 | 325.4 | 329.1 | 333.5 | 337.4 |
| 8. Liquor Sales (T$) | 9554. | 6360. | 7538. | 8931. | 9526. | 6293. | 7500. | 8334. | 8811. | 5421. | 6673. | 7616. |

[1]Number shown is for the last month of the quarter. CPI shown is the index for wage earners and clerical workers. Beginning with the data for January, 1985, the index is affected by a change in methodology used to compute the home ownership component.

Sources: Series 1-2: R.L. Polk and Company Motor Statistical Division. "National New Vehicle Registration Service." Published monthly.
Series 3,4: U.S. Department of Commerce, Bureau of Economic Analysis. Survey of Current Business. Published quarterly.
Series 4,6,7: U.S. Department of Commerce, Bureau of Economic Analysis. Survey of Current Business. Published monthly.
Series 8: Wyoming Liquor Commission. Sales data are reported to IPR.

Table 11: Employment and Labor[1]

| Calendar Quarters | 4/84 | 1/85 | 2/85 | 3/85 | 4/85 | 1/86 | 2/86 | 3/86 | 4/86 | 1/87 | 2/87 | 3/87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Civilian Labor Force | 249652. | 242092. | 256819. | 266519. | 246570. | 243710. | 253139. | 255514. | 247051. | 239055. | 245083. | 246765. |
| 2. Employment | 236455. | 223081. | 238436. | 250115. | 228368. | 220575. | 230952. | 235065. | 225690. | 213415. | 225271. | 230511. |
| 3. Unemployment | 13197. | 19011. | 18383. | 16403. | 18203. | 23135. | 22187. | 20449. | 21361. | 25640. | 19812. | 16254. |
| 4. Unemployment Rate | 5.3 | 7.9 | 7.2 | 6.2 | 7.4 | 9.5 | 8.8 | 8.0 | 8.6 | 10.7 | 8.1 | 6.6 |
| 5. Initial Claims Filed | 8237. | 13108. | 7545. | 6991. | 12467. | 15095. | 13146. | 11710. | 14560. | 13392. | 8819. | 6386. |
| 6. Applications Received | 9685. | 11106. | 12017. | 11424. | 11347. | 14321. | 14968. | 13057. | 10542. | 10013. | 11276. | 9067. |
| 7. New Non-Agricultural Openings | 8655. | 7004. | 11450. | 12640. | 9685. | 7059. | 10595. | 10997. | 7408. | 4872. | 9615. | 8532. |
| 8. New Non-Agricultural Placements | 8331. | 6308. | 9594. | 9656. | 9163. | 6348. | 8490. | 8869. | 7149. | 4182. | 8020. | 7117. |
| 9. Miners' Average Weekly Hours | 43.5 | 41.4 | 43.0 | 43.6 | 44.2 | 44.2 | 42.0 | 42.0 | 42.1 | 41.8 | 41.4 | 41.8 |
| 10. Miners' Average Weekly Pay ($) | 572.47 | 570.76 | 588.18 | 581.96 | 606.18 | 610.74 | 609.92 | 609.39 | 606.17 | 627.30 | 612.42 | 589.67 |
| 11. Miners' Average Hourly Wage ($) | 13.16 | 13.79 | 13.69 | 13.35 | 13.72 | 13.83 | 14.53 | 14.51 | 14.41 | 15.02 | 14.79 | 14.12 |

[1]The most recent year's data are preliminary.

Sources: Series 1-11: Wyoming Employment Security Commission. Labor Force Trends. Published monthly.

Table 12: Energy and Mineral Production

| Calendar Quarters | 4/84 | 1/85 | 2/85 | 3/85 | 4/85 | 1/86 | 2/86 | 3/86 | 4/86 | 1/87 | 2/87 | 3/87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Wyoming Coal (TST) | 34908. | 36243. | 34690. | 35264. | 31177. | 34323. | 30093. | 34406. | 35979. | 36762. | 34524. | 36692. |
| 2. U.S. Coal (TST) | 188471. | 220652. | 223817. | 225369. | 220701. | 226592. | 222359. | 215298. | 223892. | 217546. | 221685. | 225996. |
| 3. Wyoming Oil (TBPD) | 338. | 333. | 334. | 352. | 347. | 340. | 330. | 327. | 333. | 322. | 319. | 308. |
| 4. U.S. Oil (TBPD) | 8942. | 8877. | 8974. | 8915. | 8960. | 9052. | 8815. | 8505. | 8585. | 8364. | 8351. | 8345. |
| 5. Wyoming Natural Gas (MMCFD)[1] | 1417. | 1310. | 1070. | 986. | 1204. | 1404. | 1243. | 1092. | 1692. | 1897 | INA | INA |
| 6. U.S. Natural Gas (MMCFD) | 49888. | 51347. | 45317. | 44400. | 47757. | 48251. | 44326. | 43457. | 46823. | 49736. | 44962. | INA |
| 7. Active Rig Counts in Wyoming-Average | 128. | 99. | 81. | 95. | 96. | 57. | 25. | 22. | 38. | 23. | 27. | 47. |

[1]Beginning with fourth quarter 1986, Wyoming gas includes carbon dioxide production.

Sources: Series 1,2,5, and 6: U. S. Department of Energy. Energy Data Reports. Gas data are from Natural Gas Monthly, and the Wyoming Oil & Gas Conservation Commission. Coal data are published weekly.
Series 3-4: The Oil and Gas Journal. U.S. and Wyoming Oil Production. Published weekly.
Series 7: Petroleum Information Corporation, Hughes Tool Company. Monthly Average Active Rig Counts in Wyoming.

Table 13: Government

| Calendar Quarters | 4/84 | 1/85 | 2/85 | 3/85 | 4/85 | 1/86 | 2/86 | 3/86 | 4/86 | 1/87 | 2/87 | 3/87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Sales and Use Tax Collections (T$) | 59570. | 54966. | 50917. | 63025. | 65957. | 53816. | 47695. | 55716. | 36042. | 39867. | 39591. | 44922. |
| 2. Violent Crime[1] | 334. | 304. | 275. | 350. | 319. | 292. | 380. | 374. | 269. | 299. | 325. | 435. |
| 3. Nonviolent Crime[2] | 4170. | 4170. | 4969. | 5120. | 4212. | 4294. | 5485. | 5265. | 4294. | 3955. | 4772. | 5057. |
| 4. Stolen Property (T$) | 2487. | 2244. | 2437. | 3443. | 2447. | 2529. | 3713. | 2420. | 2222. | 1880. | 2342. | 2494. |
| 5. Stolen Property Recovery Rate | 45.5 | 51.9 | 38.5 | 51.6 | 41.0 | 34.2 | 54.0 | 38.6 | 31.0 | 41.4 | 35.7 | 33.1 |
| 6. Percent of Crimes Cleared[3] | 30.7 | 28.3 | 24.0 | 25.1 | 28.9 | 28.2 | 24.7 | 25.2 | 36.4 | 32.0 | 26.6 | 44.2 |

[1]Murder, negligent homicide, forcible rape, robbery, aggravated assault.

[2]Burglary, larceny, auto theft.

[3]Clearance of a crime indicates resolution of a complaint by arrest or other extraordinary means.

Sources: Series 1: Wyoming Department of Revenue and Taxation, Sales and Use Tax Division. "Net Collections by Business Class by County." Published monthly.

Series 2-6: Uniform Crime Reporting Center for Criminal Justice Research, Division of Criminal Identification, Office of the State Attorney General. "Crime in Wyoming." Published quarterly.

Table 14: Tourism

| Calendar Quarters | 4/84 | 1/85 | 2/85 | 3/85 | 4/85 | 1/86 | 2/86 | 3/86 | 4/86 | 1/87 | 2/87 | 3/87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Visitors, National Parks and Monuments | | | | | | | | | | | | |
| 1. Yellowstone | 100802. | 66776. | 592059. | 1500133. | 103487. | 79077. | 607923. | 1593749. | 124314. | 75835. | 681163. | 1692818. |
| 2. Grand Teton | 206801. | 130583. | 517614. | 1299635. | 181840. | 138794. | 530991. | 1314373. | 196051. | 141570. | 535659. | 1486479. |
| 3. Devil's Tower | 15145. | 8841. | 68885. | 135061. | 12157. | 9237. | 86167. | 186134. | 16610. | 8523. | 92700. | 215299. |
| 4. Fossil Butte | 1762. | 115. | 4254. | 10434. | 1213. | 205. | 4367. | 10105. | 1152. | 282. | 5082. | 13793. |
| 5. Fort Laramie | 5527. | 2625. | 26185. | 49165. | 3921. | 2027. | 28120. | 52465. | 3863. | 1305. | 35117. | 50167. |
| 6. Big Horn NRA-South[1] | 26388. | 31533. | 56612. | 77495. | 46073. | 18574. | 53634. | 65696. | 40878. | 22056. | 55064. | 70305. |
| Other Tourism Indicators | | | | | | | | | | | | |
| 7. Traffic Count (Avg. number of Vehicles/Day) | 101625. | 88135. | 131520. | 166903. | 98463. | 90397. | 119613. | 147829. | 91685. | 78349. | 116920. | 163546. |
| 8. Hotel, Motel, and Camp Sales Tax (T$) | 1389. | 932. | 1070. | 2136. | 1370. | 862. | 1185. | 2205. | 1364. | 928. | 891. | 1821. |
| 9. Gasoline Sales (TGL) | 77108. | 66798. | 83529. | 101676. | 74304. | 62891. | 76603. | 95902. | 68488. | 56561. | 79620. | INA |

[1]Big Horn Canyon N.R.A. is only partially in Wyoming. Only visitation for the Wyoming part is shown.

Sources: Series 1-6: Monthly visitor use reports of the National Park Service.
Series 7: Traffic Survey Unit - Planning Branch, Wyoming State Highway Department. "Selected Recording Stations Traffic Counter Data." Published monthly.
Series 8: Wyoming Department of Revenue and Taxation. "Sales and Use Tax Summary by County by SIC Major and Minor." Reported monthly.
Series 9: Petroleum Association of Wyoming. Monthly Gasoline Gallonage Report.

Table 15: Utilities[1]

| Calendar Quarters | 4/84 | 1/85 | 2/85 | 3/85 | 4/85 | 1/86 | 2/86 | 3/86 | 4/86 | 1/87 | 2/87 | 3/87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Residential Electric Connections | 179123. | 179451. | 181034. | 179423. | 179609. | 179931. | 179179. | 177718. | 177613. | 177091. | 176113. | 175745. |
| 2. Residential Electric Consumption (TKWH) | 484523. | 542962. | 395900. | 348469. | 510291. | 502703. | 342033. | 300186. | 408558. | 476965. | 337943. | 291941. |
| 3. Commercial Electric Connections | 32738. | 33058. | 33730. | 33782. | 33603. | 33606. | 33885. | 33786. | 33880. | 33355. | 33744. | 33898. |
| 4. Commercial Electric Consumption (TKWH) | 468378. | 504376. | 474481. | 497271. | 512748. | 499198. | 425035. | 418211. | 486495. | 438712. | 403123. | 419465. |
| 5. Industrial Electric Connections | 3059. | 2957. | 2926. | 2933. | 2872. | 2927. | 2811. | 2884. | 2655. | 2989. | 2791. | 2796. |
| 6. Industrial Electric Consumption (TKWH) | 2479998. | 1572877. | 1904448. | 2159299. | 2626516. | 1514740. | 1313271. | 1452583. | 1708946. | 1718924. | 1587866. | 1740306. |
| 7. Other Connections[2] | 3165. | 2916. | 3145. | 3219. | 3112. | 3451. | 3285. | 3317. | 3030. | 2801. | 3201. | 3195. |
| 8. Other Consumption (TKWH) | 10385. | 5321. | 19238. | 57385. | 10970. | 11110. | 41061. | 66445. | 55088. | 47998. | 51328. | 84447. |
| 9. Residential Natural Gas Connections | 75736. | 76112. | 75456. | 74772. | 75826. | 76146. | 75383. | 74548. | 75188. | 75206. | 74384. | 73512. |
| 10. Residential Natural Gas Consumption (MCF) | 2896230. | 4569541. | 2018115. | 776733. | 3018677. | 3860776. | 1833180. | 1013300. | 2661644. | 3840399. | 1944656. | 740699. |
| 11. Commercial Natural Gas Connections | 6859. | 6882. | 6785. | 6651. | 6737. | 10926. | 6651. | 6545. | 6623. | 6652. | 6617. | 6546. |
| 12. Commercial Natural Gas Consumption (MCF) | 1299535. | 2099624. | 959449. | 399430. | 1389474. | 1890077. | 1760704. | 398174. | 1125927. | 1687452. | 939284. | 408459. |
| 13. Industrial Natural Gas Connections | 93. | 91. | 92. | 96. | 93. | 91. | 91. | 91. | 95. | 98. | 93. | 88. |
| 14. Industrial Natural Gas Consumption (MCF) | 5250938. | 3191574. | 2380289. | 2328525. | 3060300. | 2914089. | 1885998. | 1309870. | 1770920. | 1129556. | 601308. | 508551. |
| 15. Other Natural Gas Connections | 46. | 46. | 47. | 42. | 42. | 42. | 40. | 38. | 37. | 37. | 37. | 38. |
| 16. Other Natural Gas Consumption (MCF) | 355. | 209. | 1805. | 8039. | 221. | 216. | 1136. | 5478. | 132. | 170. | 1225. | 7352. |

[1]Some small utilities do not report, hence the data are slightly less than actual state totals. The data are consistent. The same utilities' reports are included in each figure.

[2]"Other" includes agriculture, municipal, and other public.

Sources: Series 1-16: Reports to IPR by selected electric and natural gas utility companies. Survey conducted monthly.

Table 16: Transportation

| Years | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|
| 1. Total Estimated Cost of Motor Vehicle Accidents in Wyoming (T$) | 102,334,110 | 89,262,930 | 93,417,550 | 95,376,150 | INA |
| 2. Traffic Deaths in Wyoming | 201 | 173 | 157 | 152 | INA |
| 3. Wyoming Traffic Fatality Rate Per Million Vehicle Miles | 3.91 | 3.35 | 3.02 | 2.94 | INA |
| 4. U.S. Traffic Fatality Rate Per Million Vehicle Miles | 3.10 | 2.60 | 2.68 | 2.58 | INA |
| 5. Millions of Vehicle Miles Travelled | 5,141 | 5,163 | 5,191 | 5,166 | INA |
| 6. Motor Vehicles Registered in Wyoming | 509,287 | 508,167 | 500,324 | 396,843 | INA |
| Railroad Freight Originating in Wyoming and Carried by Class 1 Railroads (TST): | | | | | |
| 7. Total | 104,304 | 111,220 | 127,230 | 134,120 | 132,780 |
| 8. Coal | 94,122 | 100,640 | 117,165 | 123,793 | 122,128 |
| 9. Stone, Clay and Glass Products | 1,298 | 1,202 | 1,651 | 1,662 | 1,247 |
| 10. Chemical and Allied Products | 5,992 | 6,416 | 6,466 | 6,514 | 7,012 |

Source: Series 1-6: Wyoming State Highway Department. Comprehensive Report on Traffic Accidents. Published yearly.
Series 7-10: Public Service Commission of Wyoming, Transportation Department. Published yearly.

Table 17: Vital Statistics

| Years | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|
| 1. Births | 11,053 | 10,254 | 9,753 | 9,358 | INA |
| 2. Deaths | 3,183 | 3,155 | 3,180 | 3,286 | INA |
| 3. Marriages | 6,799 | 6,201 | 5,783 | 5,385 | INA |
| 4. Divorces | 3,961 | 3,978 | 3,704 | 3,807 | INA |

Public Assistance

| Years | 1982 | 1983 | 1985 | 1985 | 1986 |
|---|---|---|---|---|---|
| 5. AFDC Grants Awarded | 28,605 | 33,154 | 39,513 | 44,668 | 49,918 |
| 6. AFDC Payments ($) | 8,386,876 | 10,331,324 | 11,619,623 | 14,323,047 | 15,390,980 |
| 7. Number of Food Stamp Recipients in Wyoming | 15,272 | 22,570 | 26,148 | 26,455 | 27,819 |

Sources: Series 1-4: Wyoming Division of Health and Medical Services, Vital Records Services, Wyoming Vital Statistics.
Series 5-6: Wyoming Division of Public Assistance and Social Services, Management Information and Statistical Report.

Average Rents by City, Second Quarter 1987

| City | Apartment | Trailer Lot | House | Mobile Home |
|---|---|---|---|---|
| Cheyenne | $342.51 | $134.00 | $410.50 | $276.78 |
| Buffalo | 259.14 | 106.25 | 381.00 | 257.14 |
| Casper | 259.14 | 146.33 | 347.14 | 238.68 |
| Cody | 282.06 | 130.00 | 371.90 | 251.79 |
| Douglas | 279.50 | 116.67 | 361.00 | 215.00 |
| Evanston | 273.05 | 170.00 | 376.31 | 326.25 |
| Gillette | 258.15 | 175.00 | 422.21 | 285.94 |
| Greybull | 198.13 | 76.50 | 220.89 | 200.00 |
| Jackson | 367.42 | 128.33 | 477.57 | 270.00 |
| Kemmerer | 259.09 | 135.00 | 316.43 | 333.00 |
| Laramie | 304.71 | 129.60 | 379.92 | 263.75 |
| Lusk | 253.33 | 90.00 | 258.33 | 273.45 |
| Newcastle | 292.62 | 82.50 | 289.29 | 225.00 |
| Pinedale | 275.00 | 152.48 | 375.00 | 278.00 |
| Rawlins | 240.64 | 122.50 | 332.50 | 231.90 |
| Riverton | 248.60 | 105.00 | 288.64 | 246.43 |
| Rock Springs | 301.76 | 164.13 | 374.53 | 317.83 |
| Sheridan | 260.45 | 132.50 | 302.46 | 259.17 |
| Sundance | 243.33 | 80.00 | 265.00 | 273.45 |
| Thermopolis | 272.86 | 125.00 | 276.43 | 253.34 |
| Torrington | 250.00 | 75.67 | 252.08 | 203.21 |
| Wheatland | 235.63 | 88.75 | 247.03 | 282.50 |
| Worland | 248.46 | 115.00 | 283.75 | 237.50 |
| Lander | 237.00 | 82.50 | 309.40 | 224.33 |
| Statewide | $268.44 | $119.32 | $329.97 | $259.34 |

Source: Research and Statistics, Wyoming Department of Administration and Fiscal Control.

Wyoming Comparative Cost of Living Index (July 8-10, 1987); Statewide Average = 100

| City | Rank | All Items | Food | Housing | Apparel | Transportation | Medical | Reccare[1] |
|---|---|---|---|---|---|---|---|---|
| Jackson | 1 | 113.4 | 100.4 | 126.9 | 99.4 | 105.7 | 99.5 | 108.8 |
| Gillette | 2 | 108.1 | 103.6 | 118.1 | 88.5 | 101.4 | 111.7 | 98.2 |
| Rock Springs | 3 | 106.5 | 101.5 | 113.3 | 102.8 | 101.5 | 94.6 | 104.1 |
| Cheyenne | 4 | 105.9 | 99.3 | 113.8 | 105.3 | 98.6 | 101.5 | 100.2 |
| Evanston | 5 | 104.7 | 96.2 | 111.1 | 101.5 | 104.3 | 102.0 | 97.5 |
| Pinedale | 6 | 104.6 | 103.3 | 107.6 | 106.0 | 99.3 | 111.2 | 99.8 |
| Laramie | 7 | 104.3 | 101.7 | 109.1 | 109.9 | 99.8 | 97.0 | 97.9 |
| Casper | 8 | 102.1 | 100.1 | 101.6 | 103.5 | 103.3 | 108.3 | 101.4 |
| Douglas | 9 | 102.0 | 104.3 | 99.9 | 112.7 | 102.5 | 98.9 | 101.8 |
| Buffalo | 10 | 101.5 | 100.1 | 102.7 | 110.5 | 99.0 | 94.5 | 101.5 |
| Cody | 11 | 101.3 | 108.9 | 102.1 | 98.4 | 96.3 | 88.8 | 102.4 |
| Kemmerer | 12 | 100.4 | 99.1 | 101.8 | 100.9 | 100.6 | 96.2 | 99.0 |
| Rawlins | 13 | 99.9 | 105.7 | 98.6 | 93.6 | 99.7 | 105.6 | 98.2 |
| Sheridan | 14 | 99.8 | 102.8 | 97.5 | 96.4 | 101.4 | 108.3 | 99.3 |
| Newcastle | 15 | 97.2 | 103.3 | 92.5 | 95.0 | 99.2 | 100.4 | 101.4 |
| Riverton | 16 | 96.5 | 98.2 | 92.1 | 93.2 | 103.6 | 103.3 | 98.4 |
| Wheatland | 17 | 96.4 | 102.7 | 90.7 | 100.1 | 101.0 | 94.4 | 99.7 |
| Thermopolis | 18 | 96.0 | 96.0 | 91.7 | 106.2 | 97.1 | 96.8 | 103.2 |
| Lander | 19 | 95.9 | 103.7 | 91.9 | 88.2 | 94.9 | 105.1 | 100.9 |
| Sundance | 20 | 95.7 | 88.4 | 96.0 | 92.9 | 98.6 | 99.6 | 99.8 |
| Worland | 21 | 93.7 | 93.5 | 91.7 | 91.3 | 97.6 | 102.9 | 92.8 |
| Lusk | 22 | 92.7 | 95.2 | 86.8 | 97.2 | 99.5 | 92.4 | 97.6 |
| Greybull | 23 | 91.1 | 100.7 | 78.3 | 111.4 | 98.6 | 94.2 | 99.4 |
| Torrington | 24 | 90.3 | 91.4 | 84.3 | 94.9 | 96.6 | 92.8 | 97.0 |

[1] Recreation and Personal Care.

Source: Research and Statistics, Wyoming Department of Administration and Fiscal Control.

## FORMAT

For data available at least quarterly, the last 12 quarters are printed in WQU. In this edition, published series begin with the 4th quarter of 1984, and end with the 3rd quarter of 1987. For other data series (primarily annual), the most recent observations, up to 12, are published in WQU. Quarters are calendar quarters. For example, the 3rd quarter is composed of July, August, and September. In the table headings and narratives, a particular quarter will be indicated by notation such as 2/85 (2nd quarter, 1985), 1/85 (1st quarter, 1985), and so on.

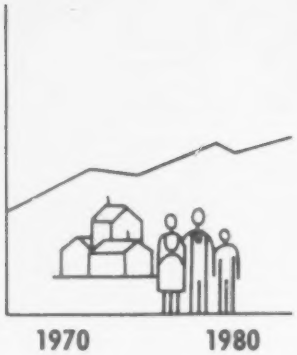
Beside each data series name is an abbreviation in parenthesis. The abbreviation indicates the units (such as dollars, tons, feet, miles, etc.) of the data. The key to the units abbreviations is below.

Throughout WQU, all data are for the State unless otherwise stated. The most recent year's data should be viewed as preliminary, due to revisions. The acronym "INA" signifies that information is not available.

The reader should be attentive to the footnotes at the bottom of pages, particularly those accompanying a data table. The footnotes help the reader to properly interpret the data, and they also indicate when more detailed (by subject or by area) data than that which is shown is available from IPR. A list of sources follows the footnotes.

Key to Units Abbreviations

| | |
|---|---|
| MBF - Thousand Board feet | CWT - Hundred Weight |
| KWH - Kilowatt Hours | ST - Short Tons |
| TKWH - Thousand Kilowatt Hours | HST - Hundreds of Short Tons |
| $ - Dollars | TST - Thousands of Short Tons |
| H$ - Hundreds of Dollars | $/ST - Dollars Per Short Ton |
| T$ - Thousands of Dollars | HBBL - Hundreds of Barrels |
| M$ - Millions of Dollars | TBPD - Thousands of Barrels Per Day |
| B$ - Billions of Dollars | MCF - Thousands of Cubic Feet |
| GL - Gallons | HMCF - Hundreds of MCF Per Day |
| TGL - Thousands of Gallons | MMCFD - Million Cubic Feet Per Day |




# CRIS

## Census Retrieval Information Service

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1987 ECONOMIC CENSUSES

February 15, 1988 is the due date for return of the 1987 Economic Census questionnaires. In late December or early January, more than 3.5 million business establishments across the country will receive a questionnaire from the U.S. Bureau of the Census. These economic censuses are conducted by the Census Bureau every five years as a tool to help in measuring the Nation's economic activities.

The canvassed firms will be asked to report on number of employees, payrolls, and value of goods or services produced or sold. Some six million very small establishments will not be canvassed, but data about these businesses will be obtained from administrative records of other government agencies, so that all establishments in covered industries will be represented in the census reports.

The economic censuses were started in 1810 as a part of the population census, but since have evolved into seven separate censuses each covering a different sector of the economy. The 1987 Economic Censuses consist of the following:

* Census of Retail Trade
* Census of Wholesale Trade
* Census of Service Industries
* Census of Transportation
* Census of Manufactures
* Census of Mineral Industries
* Census of Construction Industries

Special Programs:
* Survey of Minority-Owned Business Enterprises
* Survey of Women-Owned Businesses
* Survey of Business Owners
* Enterprise Statistics
* Survey of Business Owners
* Enterprise Statistics
* Economic Censuses in Puerto Rico and other U.S. Possessions

Data from the economic censuses provides important information for business, government, and research. Businesses use the data to locate potential markets, analyze production and sales performance, and project important trends. Business magazines republish selected statistics and use them as background for articles. Trade associations use the information to study trends in their own and competing industries, and to keep their members informed of market changes. Government uses the economic censuses to provide a framework for the gross national product and other current measures of economic activity, and to assess economic capacity and activity in the international marketplace. Researchers find in the censuses details about the economy not available from any other source and apply the data in their study of long-term economic trends. Students use the data to evaluate different industries when making a career choice.

Preliminary economic census reports will appear in late 1988, but the final reports will not be published until 1989 to 1990. The data will be published by type of business, using the revised 1987 Standard Industrial Classification system, for the nation and each state, metropolitan area, county, and city. The results will be issued in more than 700 printed reports as well as on computer tape, flexible diskette, and compact disc.

The law requires that businesses receiving the census forms complete and return them by February 15, 1988. However, the law also ensures that the Census Bureau keep the reports of individual businesses in strict confidence. Information reported will be seen only by sworn Census Bureau employees, and publications will not disclose any information about individual businesses.

U.S. Census information for Wyoming is handled by the Census Retrieval Information Service (CRIS). CRIS serves as the U.S. Bureau of the Census State Data Center and responds to specific information requests. CRIS is a cooperative service provided by the Institute for Policy Research, University of Wyoming, and the Research and Statistics Division, Wyoming Department of Administration and Fiscal Control.

We look forward to assisting you in the future.

Suzanne Taylor and G. Fred Doll
Institute for Policy Research
University of Wyoming

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